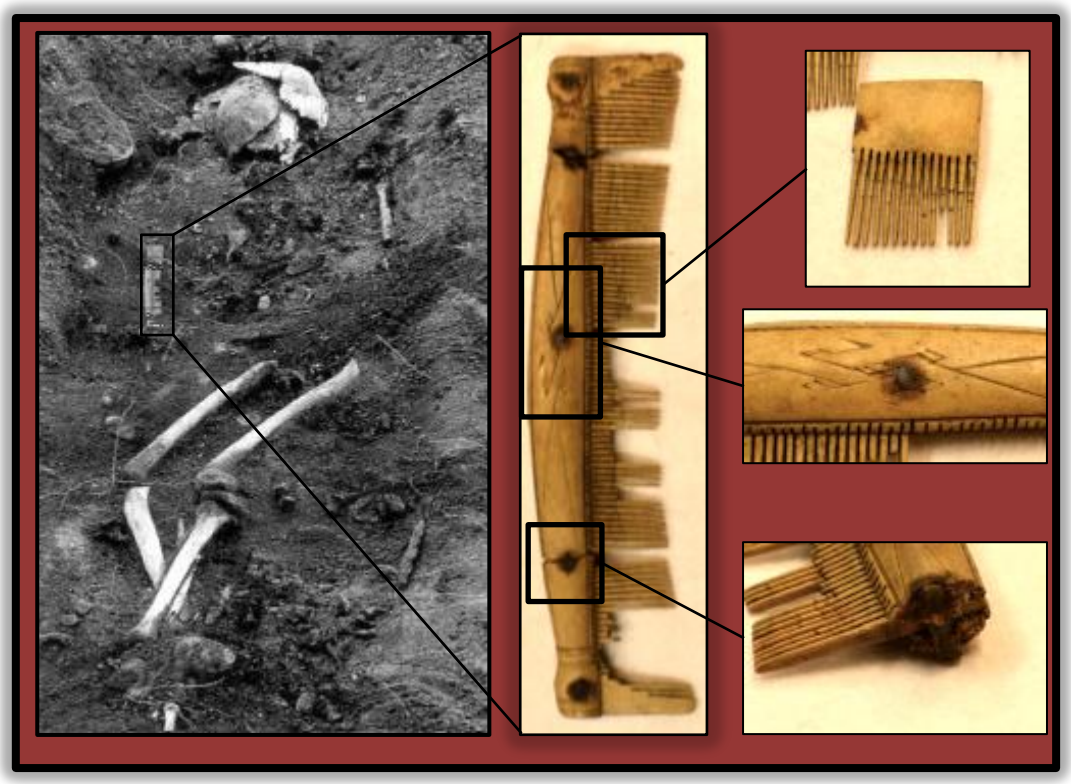
# Tracing Paths

## A Study of Combs from Viking Age Iceland



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**Front page illustration:** Picture of a Viking Age grave in Straumur, Tunguhreppur and a comb [20] found at Hrísheimar. Comb [20] has been edited into the grave and is not related (illustration taken from Eldjárn and Friðriksson 2000:223, photo of comb [20] has been taken by the author)

# Preface

A thesis does not write itself, and over the course of this year, plenty of people have helped me with either information, suggestions, corrections or moral support. The first person I would like to thank is my supervisor Unn Pedersen who has contributed with all of the above, and my thesis would probably have been a mess if it was not for her. Per Ditlef Fredriksen also needs to be thanked for helping me when I first started this project.

During the course of this year I have had many illuminating conversations and both Morten Ramstad and Morten Kutschera have provided me with great insigth and ideas regarding culture and combs. Steve Ashby has been phenomonal and answered every question I had, and held the door open for the possibilities of raw material analysis. Furthermore, this study would not have been possible if not for the help of Lilja Árnadóttir, Steinunn Kristjánsdóttir and Jóhanna Bergmann at the National Museum of Iceland and Adolf Friðriksson, Mjöll Snæsdóttir and Guðrún Alda Gísladóttir at Fornleifastofnun Ísland, who granted me access to the Icelandic combs and made sure I had an enjoyable stay in Iceland. I would also like to thank Gitte Hansen and Jón Viðar Sigurðsson for tips and litterature regarding combs and Iceland respectively.

Special thanks goes to the Isak Roalkvam, Eirik Haug Røe, Frida Espolin Norstein, Julia Kotthaus and Cathrine Bru Guldberg for proof reading. Frida and Cathrine also deserve extra credit as our discussions regarding cultural, ideological and technological aspects have certainly helped the outcome of this thesis. Last but not least I want to thank the usual crowd at B11 who made every single day of writing this thesis an enjoyable experience, and Eirin for not being angry when I was at my most annoying.

Nicolai A. Eckhoff

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# 1. Introduction

The colonisation of Iceland has for a long time been a focal point for archaeologists studying the Icelandic Viking Age. There is a common consensus among today's archaeologists that Iceland was settled either directly from Norway or indirectly from Norway by way of the North Atlantic Viking colonies. A wide array of methods has been used to underline this, from the use of DNA analysis (e.g. Bjarnason, et al. 1973; Donegani, et al. 1949; Price and Gestsdóttir 2006; Williams 1993), to settlement patterns and ecological theories (e.g. Einarsson 1994). Artefacts, however, have often been neglected for this purpose, as the various artefact types found in the grave and settlement material have either wholly been defined as typical Viking Age types (Eldjárn 1956:297-298, 394-396), or interpreted as reflecting a lack of trading options available to the Icelanders (Einarsson 1994:17). Artefacts have hence not been regarded when discussing a cultural affinity for the Icelandic people. In this thesis, I argue that by using the Icelandic artefacts, it is possible to discover novel ways of understanding the settlement of Iceland. By doing a technological study of combs found at settlements and in graves, I intend to break down what I define as each comb's life sequence, and attempt to *trace* their *paths* from their final resting place to their place of origin. Building on work done by Steven P. Ashby (2005, 2009, 2011a, b, 2013, 2014), I argue that the presence of a specific comb type instead of another is not down to chance, but to cultural choice.

At root this study builds on two basic arguments. First, some comb types do not appear in Norway, but do appear in Iceland. Second, it has been argued that Vikings in Scotland exclusively used their own tradition of comb making, even though other traditions were available to them (Ashby 2009). The arguments rely on the use of typology which will be a keyword throughout this thesis. Typology is, however, a fickle friend. Incorrect use might result in altering the nature of the combs, giving questionable results. Moreover, archaeologists often typologically identify an artefact, but end up disregarding the answer they get. Ashby (2009) has gone a long way to rectify this, creating a new typology for combs from Northern Europe as a means to replace cultural and chronologically loaded terminology. So far, no complete study has been done on the Icelandic comb material. They have at large been termed either typical Viking Age types or of Norse origin (e.g. Batey 2003:15; Friðriksson 2000:606). By doing a thorough study of the Icelandic combs, I intend to divide

them into Ashby's typology, which may explain how tradition and technology is socially embedded in combs, and how this may provide us with a picture of the Icelanders cultural affinity.

## 1.1 Point of focus

Two questions will be raised concerning the Icelandic comb material which will in many ways illuminate the possibilities that lie in the Icelandic artefact material. These are as follows:

- *Where were the Icelandic combs constructed?*
- *What can the combs tell us about the cultural affinity of the Icelandic settlers?*

Considering the point of focus, the first question affects the material part of the thesis. Hence it will mainly concern the combs and their properties. The second question refers to the overall context of the thesis, and will serve to answer the cultural impact of the combs.

## 1.2 Structure

This thesis consists of 8 chapters. Following this chapter will be a basic outline of important research done on combs in Northern Europe. This includes a thorough run through of their constructional properties, their part in trade and their ideological value. Chapter 3 consists of historically important typologies with the focus on an introduction to the previous mentioned typology created by Ashby. Chapter 4 will consist of my theoretical and methodological framework. It will be split in two where the first will introduce the reader to the way I look at technology and social traditions. The second part will outline how I intend to pick apart each comb's life sequence, by doing a technological and comparative study. In chapter 5 I will present the material chosen for this study, and its context. I will also give a brief introduction to Iceland in the settlement period and provide a basic chronologic order for all the combs. The analysis of the combs will begin in chapter 6, which will be a step by step study based on the method introduced in chapter 3. The results will then be discussed in chapter 7 utilising my theoretical framework as a way to trace the combs paths to their place of construction. Furthermore, I will argue the cultural affinity the choice of tradition brings with it. This

discussion will be concluded in chapter 8 where I will highlight the possibilities of similar studies, as well as discuss ways to continue the study of combs in Iceland. An appendix containing a detailed catalogue of the combs from Iceland is found attached.

## 1.3 Terminology

This thesis introduces a number of expressions that might be unfamiliar. Common definitions on the different parts of the comb, as well as how the combs have been measured is illustrated in figure 1. Throughout the thesis, differing definitions from the North European regions will be introduced. The North Atlantic colonies consist of the Faroe Islands and Shetland, while the Orkneys and Hebrides can be considered a part of Scotland if not further specified. When speaking of the Viking World, this comprises the areas the Vikings are known to have settled. The Western Viking World is in this thesis considered as to being the British Isles, Shetland, Faroe Islands, Iceland, Greenland and Vinland.

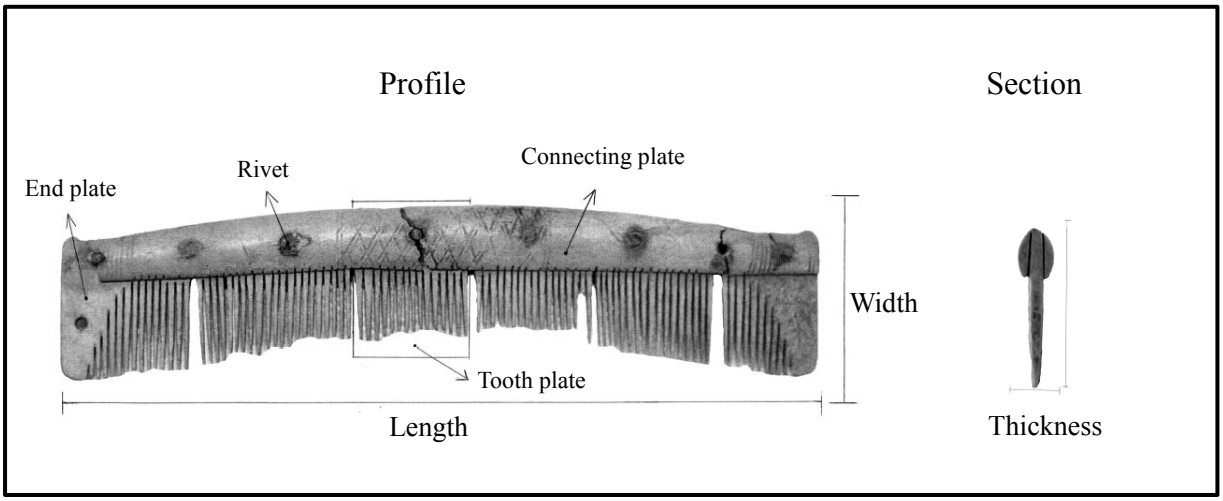


**Figure 1: Overview of the different aspects of the comb portrayed on comb [7].**

# 2. A History of Combs

Research on combs can be traced over a period of 150 years. A great deal of information has been produced in the period from William Roberts Wilde's (1857:269-274) first notions regarding combs in the Royal Irish Academy's museum, to recent attempts to differentiate raw material in combs using bio molecular methods by Isabella von Holstein (2014). Discussions centred on what the comb actually represent and who made them, have often been emphasised. In the following segment I will highlight important works and theories, specific to my thesis. Moreover, while this thesis will focus on the Viking Age, other periods will be mentioned as they can give important information on the comb's role in the Viking Age.

Essential to the current understanding of combs is that they were parts of an individual's personal equipment, being artefacts made for daily use (Ambrosiani 1981:14; Hoftun 1993:61; Petersen 1951:485; Sjøvold 1974:243). As they could be heavily decorated and often followed their owners to the grave, some aspects of the Viking Age comb must have differed from the combs we use today. Inger Margrete Eggen (2007:1) contemplates this when asking "is a comb only a comb", emphasizing the cultural meaning combs may have had. However, to get a grasp of cultural and religious interpretations of the comb, we need to detail how combs were constructed, who the people behind the construction were, and how combs would eventually end up the possession of individuals.

## 2.1 Construction

A considerable amount of research has gone into mapping out the constructional properties of prehistoric combs, and several researchers have tried to recreate their manufacturing processes (e.g. Ambrosiani 1981:103-118; Galloway and Newcomer 1981; Ulbricht 1978). From archaeological remains, we know that the most commonly used material for comb production was antler (MacGregor 1985:74). Consequently, species identification based on antler remains and its use in region wide production cycles, has often been considered an alluring subject for people who study combs (e.g. Ashby 2009, 2013; 2014:11-51; Hounslow, et al. 2013; von Holstein, et al. 2014; Weber 1995). Although antler is a tough material to

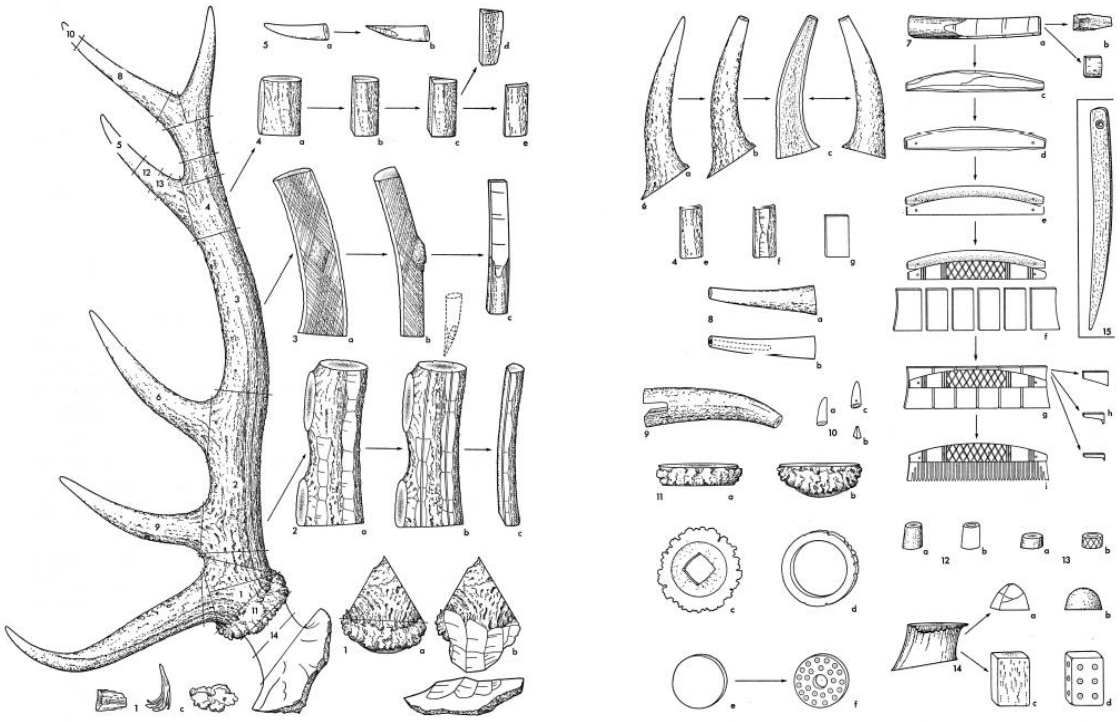

**Figure 2: The constructional process involved in making a comb (illustration from Ulbricht 1978:28-29).**

work with (Ambrosiani 1981), its mechanical properties surpass that of bone and horn. Arthur MacGregor (1985:25-29) and John Currey (1970) demonstrated this in a stress-strain diagram, showing how antler can be bended further without breaking, with a higher amount of strength than other skeletal material types. This is especially important in concern of the combs' teeth, which would already be cut along the grain of the antler, so that they could absorb the shocks of being dragged through coarse hair (MacGregor 1985:28). Most of the antler would have been used in construction of a comb (fig. 2), reserving the lower beams of the antler for the connecting plates. The upper, more crooked parts were cut into shorter cylindrical lengths, which could be made into tooth plates (MacGregor 1985:70). The parts of the antler which were considered unsuitable for comb production may have been used for smaller items, such as gaming pieces (MacGregor 1985:70; Ulbricht 1978).

After cutting the pieces needed for a comb from the antler, the comb maker would start shaping them into what would eventually become connecting plates and tooth plates. Before riveting, the connecting plates would be decorated with incised ornamentation, often featuring vertical and horizontal lines, and/or point circles, ribbon ornamentation and diamond patterns. The rivets were made from iron or copper. Bone is not unheard of, but less likely to appear in the material due to the preservative issues of the material (MacGregor

1985:62, 75). Drills were used to make holes for the rivets, which were heated up and hammered through the connecting and tooth plates. Several archaeologists have noted how different techniques have been used in riveting the comb together (e.g. Ashby 2005:24-25; 2009:16-18; 2014:57-58; Eggen 2007:28; Smirnova 2005:29-38). Ashby (2005:24-25; 2009:16-18) points to five main techniques: central, every edge, alternating edge, mix, and decorative. He illustrated the legitimacy of these five techniques by demonstrating how some comb types kept to one technique, while others seemed inconsistent in choice of method. As such, he pointed to how some combs portrayed an industrious conservatism, while others appeared to be objects of specialized comb makers (Ashby 2009:17-18).

After the comb had been riveted together, the excessive edges of the tooth plates would be cut to match the connecting plates. The teeth of the comb would then be cut depending on the type of comb being crafted. This practice often resulted in cut marks on the connecting plates, which some archaeologists argue to be part of the decoration on the comb (e.g. MacGregor 1985:75). The final decoration would either take place before the comb would have been riveted together, or at the end of the construction process (Ambrosiani 1981:114). The tools needed for making a comb would thus most likely have been: saws to cut the teeth; hammers to split the tines; rasps to smooth surfaces; wedges to hold plates together; and drills and knives for décor (Ambrosiani 1981:113-117; Christensen 1986; MacGregor 1985:74-76; Petersen 1951:489-490; Riddler and Trzaska-Nartowski 2003; Sjøvold 1974:243; Weber, et al. 2007).

## 2.2 Who were the comb makers?

Now knowing the general process involved in the construction of combs, we can move on to identifying the comb makers, and how they operated in the Iron Age. Arne Emil Christensen (1986) has argued for what he considered to be a comb maker's grave from the Merovingian Period in Eltdalen in Trysil, Norway. The grave contained several types of files, knives, saws, a clamp made from antler and a small hammer, all items which can be tied to the construction of combs. The saw was considered to be especially important, as its blade matched the gap between the teeth of a comb found in the same grave, giving the impression that the individual buried, had constructed the comb himself. Among the tools, Christensen (1986) also identified weapons, which made him conclude that comb making and reindeer hunting may have been a pre-historic work combination.

Drawing assumptions on basis of tools can, however, be problematic, as Jørgen Bøckman (2007) has illustrated with his analysis of Petersen's (1951) classification of smith tools from the Norwegian Viking Age. If we use a similar concept on what is defined as a comb maker's tools, we see that rasps have commonly been thought of as a proof of the presence of a comb maker (Petersen 1951:489; Sjøvold 1974:243), although rasps may very well have been used for other professions. Gerd Færden (2007:95) presented a similar argument, concluding that finds of tools associated with comb production from the early Medieval Period farm of Vesle Hjerkin could have been used in other crafts than comb making, and that these were too sparse to point to a full time comb maker.

The first archaeologist to present a complete theory on comb makers in the Viking Age was Ingrid Ulbricht (1978), who studied the comb material from Hedeby in Northen Germany. In her book, she maintained that there were no specialist comb makers, as she assumed that the comb maker had to be a stationary craftsman (Ulbricht 1978:140). Utilizing comb production debris to support her claim, she used the number of sawed off tooth plates to estimate that a number of approximately 15 combs were made yearly at Hedeby, which was not enough to support a full-time comb maker (Ulbricht 1978:118). Kristina Ambrosiani (1981:41), however, disagreed with Ulbricht. She argued that the spread of antler debris in Hedeby was similar to that of Ribe, supporting the idea of an itinerant model, which would entail they were travelling crafters going from market to market to produce combs, hence never leaving larger concentrations of debris behind (Ambrosiani 1981:40). In her thesis, Ambrosiani (1981) studied the material from Birka and Ribe, pointing to two different hypotheses on comb makers; that of the previously mentioned itinerant comb maker, and that of the local comb maker. Judging by the difficulty of working with antler material, she emphasised that the finished combs should be considered high class craftsmanship. Moreover, as the same quality of craftsmanship is found universally, it suggested that they were made by specialists rather than home craftsmen (Ambrosiani 1981:47).

One year prior to Ambrosiani's defence of her thesis, Axel Christophersen (1980) defended his thesis on bone and antler production in Medieval Lund, Sweden. His use of the material was not only meant to solve problems regarding comb production, but also to identify the transition from the Viking Age market type to the Medieval Period market type. To explain Lund's gradual shift in material from antler to bone, he divided Lund's history into two

sections: one from 1000-1150AD, and one from 1150-1350AD. Moreover, he defined the transition as the development of an increasingly specialized craft (Christophersen 1980:179-180). Underlining this was the fact that an increasing amount of different types of bone artefacts appeared in the material, which also implied a shift to more internal divisions of labour (Christophersen 1980:181), making way for the mass production of combs. Nevertheless, he agreed with Ambrosiani (1981), stating that the combs from the first period may have been made by itinerant craftsmen as they were better crafted and more detailed (Christophersen 1980:194-195). As a result of his research, he developed a theory of a market transformation process consisting of three steps: A non-specialist production based in the household; a specialist itinerant craftsman who could visit households as well as markets; and a stationary craftsman based in a city with market production. In later years, his work has been criticized (e.g. Ambrosiani 1981; Mikkelsen 1994), but it still serves a purpose outlining the different interpretations of a comb makers trade.

The idea of an itinerant comb maker is widely regarded as an established fact. Ashby (2014:60-63) has, however, pointed out that this model does not fit the British comb material. Moreover, he emphasises the difficulties concerning the acquisition of raw materials, and the ambiguity concerning the regularity or persistence of the comb makers' apparent travelling patterns. A lack of similarities between Norse and Pictish comb types undermines the itinerant model, which has led Ashby (2014:63) to "…believe that combmaking took place in many different social, economic, political and environmental contexts, and that this regional variability is important". As such, Ashby stresses that the absence of material and debris does not give sound evidence for an itinerant model. This is an important factor regarding comb production which will be discussed more in detail later, especially considering the lack of production material and debris from comb production in Viking Age Norway and Iceland.

The only remains from Viking Age comb production found in Norway were found at the recent excavation at Bjørkum, Lærdal, which revealed the remains of a farm with a wide range of overlapping functions (Ramstad 2010, 2011). Three complete combs were excavated, as well as production debris and semi-manufactured items. Although the site did not indicate any permanent comb production, Bjørkum is situated strategically by old traffic arteries, and had access to premium reindeer products from Dovre (Ramstad 2011:51-52), which could be utilized in production or trade. One of the combs also had similarities in artwork with Sami traditions (Ramstad 2011:42-43, 50-51), which underlines on-going

theories by Ashby (2011b:314) and Maja Dunfjeld (2006:64-67) regarding connections between comb production and the Sami population

The lack of evidence from comb production in Norway has often been attributed to the poor conservational properties of the Norwegian soil. This is illustrated by Kaupang where most of the organic material which once may have existed, have rotted away (Pilø and Pedersen 2007:183, 189; Skre 2011:420-421). In fact, Kaupang is the only trade centre in the Viking Age where no evidence of comb production has been found. Furthermore, there seem to be a lack of combs in the Norwegian material from 950 – 1000 AD and no present literature seem to point with certainty to combs in this period.

There are also ongoing discussions on whether comb makers' held knowledge of more than one craft. Large concentrations of antler found with unworked amber in Kolobrzeg, Poland, in the second half of the 9th century, made Eugeniusz Cnotliwy (1956:177) question whether comb makers' may have worked with amber next to constructing combs. Similarly, antler debris in a Viking Age silver workshop in Fröjel Gotland (Söderberg and Gustafsson 2006) might point toward a less uniform craft than previously assumed. Hildegard Elsner (1992:103) has pointed to similar options available to less specialized comb makers when the demand for combs was low.

## 2.3 Trade

The acquisition of raw materials and trade of completed combs are both central questions in the ongoing discussions regarding comb production. Finds of Norse combs across the British Islands have been the basis of theories regarding trade from Scandinavia, as have finds of reindeer antler debris. Beverly Smith (1995) argued that trade in antlers began as early as the late 6th to the early 7th century, based on the identification of 7 combs made from reindeer or probable reindeer antlers. However, recent research utilizing molecular biology has disproved this theory, demonstrating that the introduction of reindeer antlers occurred no earlier than the 9th century AD (von Holstein, et al. 2014). Concerning the combs discovered in Iceland, Natascha Mehler (2007:234) argues they were subject to trade as there is no evidence of comb production in Iceland.

Debris of foreign antlers found at North European Viking Age markets has been explained as

a way to support the diminishing amount of material from local sources around the market places (Christophersen 1980:138), or as an itinerant comb maker's own supply of material (Ambrosiani 1981:52). There is currently little evidence for large scale trade in comb material in the Viking Age, as opposed to in the Medieval Period where it was traded either in antlers (Mikkelsen 1994; Rytter 1997:104-105) or in semi-manufactured combs (Weber, et al. 2007). A trade in reindeer antler between the Vikings and the Sami is likely, and Ingrid Sommerseth (2009:263) explains how increased finds from Sami sites can be seen as a sign of heightened demand of reindeer products from Norse societies.

Egil Mikkelsen (1994) studied the products from hunting in the Viking and Medieval period at Dovre. Based on the use of pitfalls in the Viking and Medieval period (Mikkelsen 1994:110), he believed that the hunting of reindeer had been a small stone in a big economical system in the late Viking Age and early Medieval Period. In addition to supplying the local community, it also served to strengthen the position of the king on a national level (Mikkelsen 1994:138). Furthermore, he argues that the combs found at Tøftom, Oppland, were produced on site, as the many remains of antlers with marks from saws, and debris indicates that material has been processed (Mikkelsen 1994:72). Thus he considers the distribution of semi-manufactured products and combs to take place through a re-distributed system where chieftains and kings in local centres played an important role for the organisation of business, the hunting of reindeer, and other exploitation of outfield resources (Mikkelsen 1994:161).

Evidence of trade in comb material has also been found at the early Medieval Period King's Farm, Vesle Hjerkin. The material has been studied by Weber (2007), Jens Rytter (2007) and Tina Wiberg (2007) and they discovered 13 medieval comb fragments as well as manufacturing debris of antler which could be dated to the 11$^{th}$ and 12$^{th}$ century. The large amount of antler debris is considered evidence that the farm existed as a gathering point for antler before it was shipped to larger cities (Rytter 2007:113). Unlike Mikkelsen (1994:161), Rytter (2007:114) does not think that the trade of antlers has been restricted by the king or bishop, as it would be more likely that antlers would be seen as a by-product of the reindeer hunting.

Trade is, however, not the only means of transferring combs across regions, and Ashby (2014:106-107, 110-111) has noted the possible value of using combs in gift exchange. This

is due to the combs' inherent ability to portray individuals' status. Thus by giving subjects combs as gifts, they could be lifted up a step on the social ladder (Ashby 2014:116). The theory is supported by Johan Callmer's (1995) work on production and social order in central places and markets in southern Scandinavia. His research has illustrated that comb production and bronze casting kept to the political central places in the Merovingian Period implying a production aimed at gift exchange (Callmer 1995). This was still dependent on the value the comb may have had, which brings us to the last part of this chapter.

## 2.4 The value of the comb

The combs' cultural characteristics have often been overshadowed by research on the comb maker's trade. However, as some have pointed out (e.g. Ashby 2005, 2009, 2011b, 2014; Øye 2005), the cultural and ideological side of comb can be directly tied to the importance of the comb trade and how we go about understanding it. Oddgeir Hoftun (1993) was one of the first to note the cultural value of combs, as he believed religious belief could be tied to them. He pointed to the position of combs in Roman Period graves in Western Norway, as well as emphasising that the comb's décor may have been used to illustrate cosmological and ideological beliefs. He underlined this by comparing his theory with the common practice of using a comb for liturgical purposes in early Christian times (Hoftun 1993:56; Øye 2005:393), as well as the common belief that an individual's life force is situated in the hair (Hoftun 1993:58).

Hair is thus often in the center of attention in regard to the value of combs, as combs can be thought of as a medium through which hair is portrayed. Hair, although important, is not the focus of this thesis, and I will leave it with the fact that it was considered a significant cultural aspect of identity in the Iron Age (e.g. Ashby 2014:67-97; Gansum 2003; MacGregor 1985:73; Töpfer 2010; Øye 2005). This could have increased the value of the comb considering how personal grooming was often considered an aristocratic behavior (Ashby 2014:110). As such, it is possible to claim that combs portrayed the social status individuals.

That combs often appear unburned in cremation graves in the Norwegian Viking Age could be seen as evidence to ideological aspects to Viking Age combs, as demonstrated by Jan Petersen (1951:489) and Thorleif Sjøvold (1974:238). Eggen (2007) saw this as an indication of a cultural side to combs. She analysed the Viking Age combs' cultural roles, interpreting

them as an aspect of the attempt of individuals to differentiate themselves from others. Furthermore, she argued that personal equipment was linked more closely to the owner than other artefacts, being of more personal meaning (Eggen 2007:108). Ulrikke Töpfer (2010) also emphasized the cultural value of combs, as she analysed comb material from Iron Age graves in Østfold, Eastern Norway. Through the concepts of "homeworld" and "foreign world", she argued that combs played a different role in life than in death. Her analysis indicates that the combs' role in graves is both symbolic, and a creator of identity (Töpfer 2010:73).

Toward the Medieval period, combs gradually lost their ideological values, and the high quality combs we know from the Viking Age, gave way to the mass produced versions of the Medieval Period (Ashby 2014:110; Christophersen 1980:197-200). Unlike in the Viking Age, where there are few finds of comb material and antler debris, these can be found in all the major early Medieval Period cities in Norway. Oslo (Grieg 1933; Wiberg 1977), Bergen (Grieg 1933; Hansen 2005; Øye 1999, 2006), Trondheim (Flodin 1989) and Kongehelle (Rytter 1997) all demonstrate evidence of comb making, and written sources from Bergen tell us that combs had become cheap, inexpensive items (Christophersen 1980:197). Ingvild Øye (2005) disproved this, emphasizing that the combs carried a symbolic side far into the 14$^{th}$ century. This is illustrated by the varied state of comb material in Bergen, indicating two different sides to comb production; mass produced poor quality combs, and high value good quality combs. Moreover, Øye (2005) explains that the combs found could indicate the status of individuals. Such variation may also have had implications for the comb making industry, and Ashby (2005:259; 2011b) has suggested that by identifying variations in the comb production between rural sites and larger settlements in England and Scotland, one may see differences in the organization and means of distribution of the comb trade.

In Scotland, David Clark and Andrew Heald (2002) researched double-sided composite combs from the late Norse period, suggesting they could be interpreted as symbols for important changes. The appearance of "fish tail" combs underline this, as they appear during a time of economic changes in Scotland and Shetland, tying them directly to the increasing fishing economy of the late Norse Period (Clarke and Heald 2002:86). Scotland had worked as a sort of "melting pot" for combs for a long time. Ashby (2009), made steps to identify differences in the technology, and argued that the Pictish combs in Scotland survived the influence from the Norse types. The result was a period where the two comb types existed

side by side, either reflecting two different communities or as displaying different social roles (Ashby 2009:23-24). Interestingly, both forms have been found in reindeer antler variant (Ashby 2009:27). Scotland in many ways illustrates how a great deal of different comb types, may appear in the same region, bringing us to the important question regarding typology.

# 3. Typology

In the introduction I discussed some hazards regarding the use of typology in archaeology. These are not ground breaking statements, as the concept of typology has been critically reviewed before (e.g. Adams and Adams 1991; Whallon and Brown 1982). This is not to say that the use of typology should be discarded, but utilizing a typology without careful consideration and study of its basics, may prove to be problematic. Even after carefully studying a chosen typology, it will never be as precise as it was for the developer. The interpreter of the typology will always be situated within what can loosely be defined as a hermeneutic circle (see Johnsen and Olsen 1992). I would therefore argue that it is impossible to identify artefacts objectively within a typology. All too frequently, the artefacts are distinct from the type specimen, and a subjective choice must be taken. Consequently, you can never be certain that the choice you make would agree with the developer of the typology. It falls on the developer to be as precise as possible with the typology, so the interpreters can judge their material accordingly. Thus the basic premises for using a typology should consist of: knowledge of previous typologies; general knowledge of the material in question; in-depth knowledge of your chosen typology.

This is in many ways why I have decided to utilize Ashby's (2009, 2011b) typology on the Icelandic comb material, as he states that "it is intended that this classification be used, when helpful, alongside descriptive accounts of objects. In no way is it suggested that the classification constitutes an alternative to detailed description, or discussion of relevant parallels" (Ashby 2011b). He is, in other words, well aware of the problems involved in the use of typology, and leaves room for using comparative interpretations. However, before I outline the details of Ashby's typology, I will provide some insight into previous important typologies. As stated above, these need to be studied in order to obtain a more complete picture of the use of combs in the north European Viking Age, which again will highlight important aspects of the use of combs in Viking Age Iceland.

## 3.1 Previous Typologies

The most basic way to categorize a comb is to sort them after their constructional properties. By differentiating between these properties, Patricia Galloway (1976:19) ended up with four

primary groups: single sided combs, single sided composite combs, double sided combs and double sided composite combs. These groups are widely accepted and used today to efficiently classify combs from the Iron Age in Europe (e.g. Ashby 2009:73-98; Dunlevy 1988; MacGregor 1985; Smirnova 2005; Wiberg 1977:202-209). In Norway, the composite combs originates in the later Iron Age and medieval periods, while the one-piece combs are more typical of the earlier Iron Age periods (Sjøvold 1974:238). However, there are internal classifications within each period and often within each region.

Karl August Wilde (1939) was one of the first archaeologists who attempted to devise a typology specific to combs from the Viking Age. Based on 37 combs from Wollin, north-west Poland, he created five groups determined by the shape of each individual comb. Herbert Jankhun (1943), however, argued that Wilde's classification would not work on combs from other locations, as the 18 combs found at Hedeby, northen Germany, did not fit Wilde's proposed typology. He consequently created his own five groups, based on both shape and décor. The excavation at Hedeby in 1963-64, revealed an even larger quantity of combs. 85 combs in total were discovered, and Wolf-Dieter Tempel (1975) suggested that a more extensive classification would be needed. He therefore combined the combs from Hedeby with combs from Scandinavia and organized them into fourteen groups. He called them "form groups" and they were based on detailed variations in the connecting plates, the comb ends, their cross sections, edge ornament, end plate décoration, décorative motifs, décorative elements and back ornament of the combs (Tempel 1975).

Concerning later periods, a typology of Medieval combs was developed by Christina Wiberg (1977) as a way to organize material found in Medieval Period Oslo. Her combs were divided into groups ranging from E1-6 consisting of single sided composite combs, and D1-4 consisting of double sided composite combs. Her work is popular among people studying the Norwegian Medieval Period and has often been referenced when speaking of comb production in the early Medieval Period cities (e.g. Flodin 1989; Rytter 1997; Wiberg 1987).

Ambrosiani's (1981:18) classification has been widely accepted and is often used by others, either on its own (e.g. Einarsson 1994:96), or as a foundation for newer typologies (e.g. Eggen 2007). She found earlier typologies either irrelevant or too difficult to use on the fragmented combs from Birka, and she therefore developed a typology more suited to her material. At first her typology was constricted to the décor on the combs, but she later

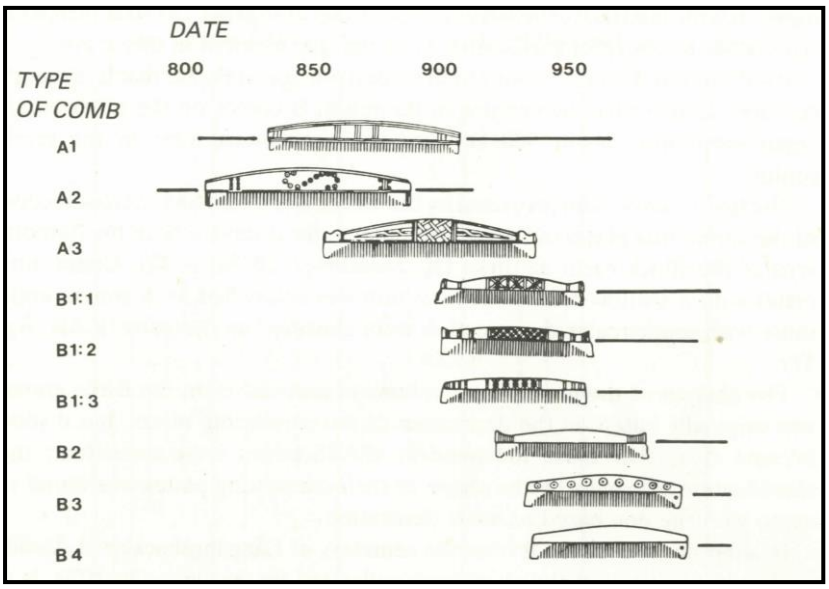


**Figure 3: Overview of Ambrosiani's comb types and their general age in Birka's graves (illustration from Ambrosiani 1981:25).**

discovered that the décor was consistent with the comb's form as well. As her comb types occur across northern Europe, it is commonly referenced today. The chronology of Ambrosiani's combs spans the Viking Age, with the oldest combs dating back to the 9th century while the younger has been found throughout the 11th century (Ambrosiani 1981:18). She divided her combs into two main groups, differentiated by the cross section of their connecting plates' section. The first, termed type A, had a shallow convex cross section, while the second, termed type B, had a semi-circular cross section. The combs were then further divided into 7 sub-groups based on their decoration, which included vertical lines, horizontal lines, point circle ornaments, braided décor, diamond décor, and combs with no decoration at all. The earliest A-combs date back to the 9th century, approximately 100 years before the first B-combs appeared (Ambrosiani 1981:26) (fig. 3). The B-combs are uncommon in the Norwegian Viking Age material, prompting Ambrosiani to assume that the A-combs originated in Norway and Eastern Sweden (Ambrosiani 1981:31-35).

Combs discovered in Dublin have been classified by Mairead Dunlevy (1988), as she divided the early Irish comb material into 10 different classes, including both Pictish and Viking types. Her typology has played a similar role in the British Isles as Wiberg's (1977) has in Norway, and it is therefore often used on combs from late Medieval Period sites in the British Isles (e.g. Hurley 1997).

The last typology which I want to highlight, before discussing Ashby's typology, was created by Lyubov Smirnova (2005) in order to cover the great amount of combs found at Novgorod in Russia. Not so much a typology as a way to think, she considered previous typologies to be too ambiguous, and thus decided to follow Galloway's (1976) example and divide the combs

into either simple single and double sided combs, or composite double and single sided combs (Smirnova 2005:16). However, she focused on finding parallels to her material, as well as providing detailed description on morphological traits. Hence, she studied every technological aspect of the combs from Novgorod, which is similar to what I intend to do with the Icelandic comb material. However, contrary to her work, I intend to use Ashby's typology as an active part in my studies.

## 3.2 Ashby's typology

As stated in the introduction, I intend to use Steve Ashby's (2009) typology to identify the Icelandic Viking Age combs. Ashby (2009) developed his typology with the clear goal of examining native-Scandinavian contact in Atlantic Scotland and how it affected political, economic and social dynamics in the regions early Viking Age. Moreover, he wanted to replace cultural and chronologically loaded terminology such as Viking, Norse and Pictish, and replace it with clear and unambiguous typology (Ashby 2009:3). His typology spans the period from the 3$^{th}$ century to the 15$^{th}$ century, and contains 14 different main groups. Representing Ambrosiani's comb types is Ashby's type 5 (A combs) and 6 (B combs) (Ashby 2009:6-8), though they draw on slightly different distinctions. As previously stated, this thesis will in many ways build on his arguments and what follows will therefore be a short introduction to his typology, with emphasis on the five types (**5, 6, 7, 9, 13**) visually identified in Iceland (see Ashby 2011a for a complete outline).

Of the 10 major comb types in Ashby's typology, two types belong to the earlier Iron Age phases. These are dated to the 3-6$^{th}$ (**type 10**) and 3-8$^{th}$ century (**type 1a-c**), which indicates that they are too old to appear in the Icelandic material. Hence, they will not be discussed any further. **Type 2** combs are split into 3 sub-types (**2a-c**) and are typically found in England, northern France, the Netherlands and northern Germany. **2a** use flat-sided connecting plates cut from sheep or other domestic animals and often appear to be crudely constructed. **2b** can be thought of as the direct opposite as they are finely ornamented and well-constructed. They usually appear with concave-convex profiles and winged or flared end plates. The last of these, **2c**, have connecting plates featuring a plano convex section and a slightly coped profile. **Type 3** combs are easy to identify based on the handle of the combs. These often appear asymmetrical and elegantly decorated, and are mainly found in England and continental Europe. **Type 4** are generally found in north-western Europe and consist of

double sided composite combs of horn and bone with short paired strips of bones fastened with between two and four rivets. **Type 8** combs are divided into three sub-types; **8a** with triangular section; **8b** with a trapezoidal section; **8c** with deep plano convex sections but squarer in profile and lacking in ornamentation. **Type 11** and **12** both consist of double sided composite combs, but while **type 11** can be defined as short in relation to its height and with discrete decoration, **type 12** combs are long with shallow plano convex sections, and are often found undecorated. Both **type 11** and **12** have been found in England and Scotland, though only type **11** appears in Ireland. **Type 14** combs are all double sided and made from a single antler piece. This type is split into three sub-types; **14a**, large double sided one-piece combs; **14b**, small double sided one-piece combs; **14c** ornate one-piece double sided combs.

**Type 5** is the first among Ashby's comb types appearing in Iceland. This type includes Ambrosiani's type A combs (fig. 4), but also contains several pre-Viking Age antecedents as well, such as the late Norwegian Merovingian Period combs and the finely ornamented horse combs often appearing in the early Viking Age. They are often identified by their considerable length (most measure above 18 cm), as well as their plano convex profile and shallow plano convex section (Ashby 2011a). They have been found in all the northern European countries, though are most common in Norway, Sweden, Denmark, northern Germany, Scotland and the North Atlantic colonies (Ambrosiani 1981; Ashby 2009; Hamilton 1956). They can usually be found in contexts from the 8$^{th}$ century to around 950 AD, when they would most likely have been gradually replaced by either **type 6**, **7** or **9**.

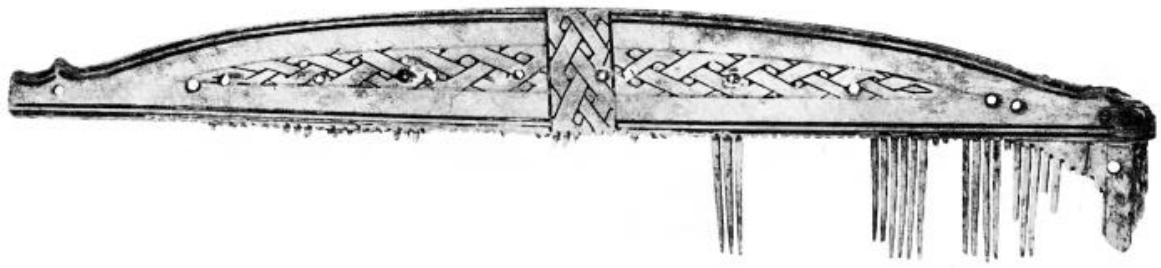

**Figure 4: Example of a type 5 comb (illustration from Ulbricht 1978:tafel 32).**

Ambrosiani's type B combs outlined above correspond with Ashby's **type 6** (fig. 5). These combs became popular in the beginning of the 10$^{th}$ century and obsolete halfway into the 11$^{th}$. They are frequently found in Sweden, Denmark and northern Germany (e.g. Ambrosiani 1981; Ashby 2009; Tempel 1975; Ulbricht 1978), and occasionally in England and Ireland. In Norway and mainland Scotland these combs are almost non-existent (Ambrosiani 1981:48)

although they have occasionally been found on the Hebrides, the Orkneys (Brøgger 1930:183) and Shetland (Ashby 2011a). They can be identified by their plano convex section and profile and the general shorter length (most examples range from 10 to 15cm) than **type 5** combs.

**Figure 5: Example of type a type 6 comb (illustration from Ulbricht 1978:tafel 32).**

**Type 7** combs (fig. 6) feature a range of irregular profiles which distinguish them from **type 5** combs. Some can be bowed, while others are seemingly straight. They are generally found in England, Ireland, Denmark, northern Germany, the Netherlands and northern France. Their connecting plates often have a deep plano convex sections and frequently feature slimmer connecting plates than **type 5** combs. Most examples can be dated to between 900-1100 AD (Ashby 2011a).

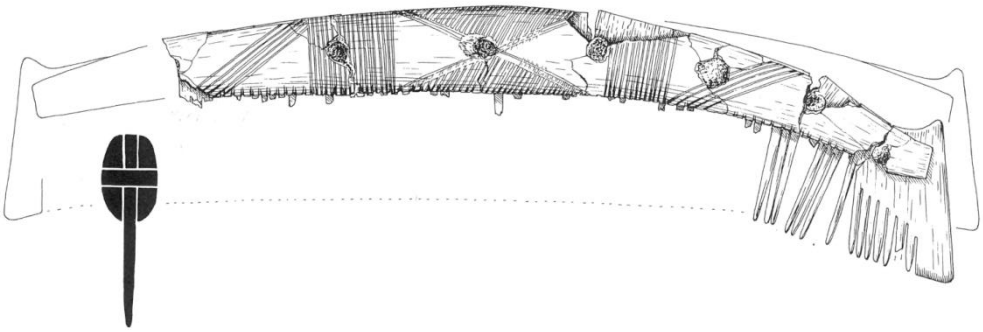

**Figure 6: Example of a type 7 comb (illustration from Dunlevy 1988:413).**

**Type 9** combs (fig. 7) comprise a wide variety of medieval period combs, but common traits consist of copper sheeting and rivets. These are generally dated to the 11$^{th}$ century, though earlier examples have been found in the 10$^{th}$ century (Ashby 2009:8). Interestingly, none of these have been found in England, Wales or Ireland. They appear in Oslo (Wiberg 1977:204) and Lund (Persson 1976:319) at the beginning of the 11$^{th}$ century and Grieg (1933:224) argues that they should be considered common from the beginning of the 12$^{th}$ century in Oslo and Bergen. In Kongehelle, they can be dated to the middle of the 12$^{th}$ century (Rytter

1997:60); in Trondheim (Flodin 1989) and Sigtuna (Ros 1990) they have been found as early as the beginning of the 11th century. Smirnova (2005:29, 51) mentions that the use of copper rivets is more frequent in the 11th century Novgorod than in the 12th, though combs with copper sheeting do not appear before the 12th century.

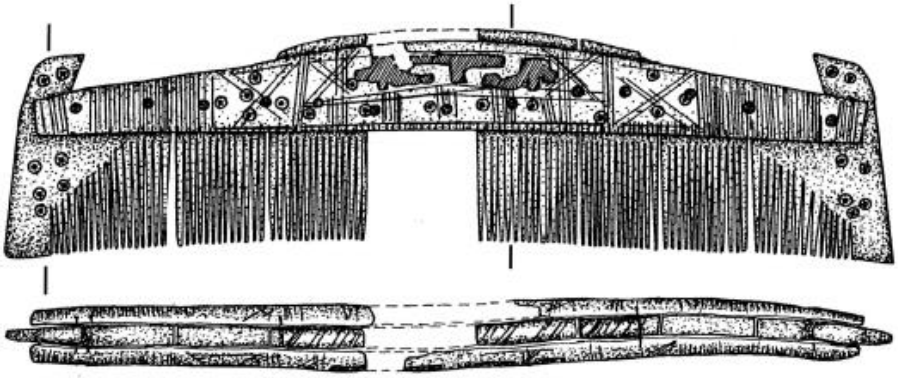

**Figure 7: Example of a type 9 comb (illustration from Smirnova 2005:55).**

**Type 13** combs are double sided composite combs (fig. 8), defined by copper rivets and differentiated teeth. This type can be found in all the Scandinavian countries (Ashby 2011a; Grieg 1933:234-240; Persson 1976:317-332; Wiberg 1977:202-209; Wiberg 1987:413-422) as well as in Scotland and Ireland. Ashby (2009, 2011b) broadly dates these combs to between the 12th and 15th century.

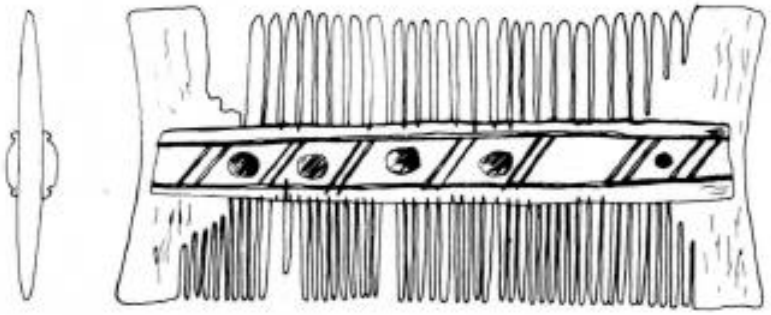

**Figure 8: Example of a type 13 comb (illustration from Wiberg 1987:418).**

One important aspect to note regarding these comb types is that they all appear in the British Isles as well as in Iceland. This is in contrast to for example Norway, where type 6 combs seem to be non-existent. This is an important cultural laden aspect which I will get back to in the later chapters. However, before presenting and sub-dividing the Icelandic comb material according to Ashby's typology, the methods used for this division must be presented. A theoretical framework is also needed in order to make suggestions about the cultural properties associated with the combs.

# 4. Theoretical and Methodological Framework

## 4.1 Chaîne opératoire

Through the last decade, technical approaches to archaeology have often been based on the theoretical and methodological concept of *chaîne opératoire*. The concept is based upon the basic premise of a technological chain of events, i.e. following the step by step creation of an artefact from the acquisition of raw materials to the final deposition of the artefact. This is an intricate approach to artefacts, tracing technological steps consisting of a multitude of cultural, political and sociological layers. In her book, *Technology and Social Agency,* Marcia-Anne Dobres (2000), has written an in-depth analysis of *chaîne opératoire*. By ascribing social agency to technology, she tries to unravel the life of the creators and the owners of the artefacts we uncover. Her book is based on the idea that *"...while artefacts may have a fixed life history, technology is an ongoing and unfinished process"* (Dobres 2000:4). Always evolving it fills the lives of craftsmen, owners and traders alike, giving them identities and constructing webs that uphold societies. As such, it is ideal for technological studies, and it will serve as the theoretical and methodological backbone for this thesis. Consequently, I will first highlight some of the important concepts in *chaîne opératoire* that are significant to my theoretical and methodological framework, before explaining how I intend to carry out the analysis.

### 4.1.1 Agency theory

Central to new thoughts about *chaîne opératoire* is the concept of agency theory. The definition of agency can be problematic, but the concept has roots in Greek philosophy where the idea behind the "nature of consciousness and reasoning" first appeared (Dobres and Robb 2000:4). Humanity is, according to Greek philosophy, filled with free thinking people capable of making their own choice. This concept has, however, been heavily debated in later times with theorists like Anthony Giddens (1979, 1984) and Pierre Bordieu (1977) emphasizing that mankind is not as much free willed as they are socially embedded, imperfect and often impractical people. Therefore it is commonly thought that human agents create and reproduce

society through their actions, which are again shaped and constrained by the broader society in which they live (Gosden 2005:193). This concept can be traced back to Karl Marx's focus on production which can be seen as a theory of knowledge concerning people's practical engagement with the world, hence linked material and experimental activity to society, thought, and beliefs (Dobres and Robb 2000:5).

Both Giddens and Bordieu can be seen as pioneers to the concept of agency theory. Giddens (1979, 1984) argued, with his "duality of structure", that people, as a result of the unintended consequences of their actions, create the conditions and structures in which they lived. Bordieu (1977) with his focus on "habitus" or "our day to day routines", stressed that people create and become structured by institutions and beliefs beyond their conscious awareness or direct control. It was first during the 1980s and 1990s that the use of agency in archaeology started to intensify, with people studying areas concerning the individuality of humanity. Among these were people interested in gender dynamics, phenomenology, inequality, and material culture in and of itself (Dobres and Robb 2000:7-8). Consequently, this has, as stated earlier, created problems to how we define agency. Dobres and John Robb (2000:8) have gone ways to rectify this, and mention four main principles in agency theory:

> "the material conditions of social life; the simultaneously constraining and enabling influence of social, symbolic and material structures and institutions, habituation, and beliefs; the importance of the motivations and actions of agents; and the dialectic of structure and agency" (Dobres and Robb 2000:8).

The interpretation of agency is, however, still varied, and you are therefore more or less free to adapt it to what you are studying and what you wish to accomplish. Dobres (2000:144) calls agency a multiscalar dynamic process, as archaeologist can choose to focus on whatever phenomenological scale they want. In that way, agency becomes tailored towards the research of your choice. For instance, does agency only concern individuals or can it also work for groups of individuals? For the sake of this thesis, a view of agency as an inherent part of objects and individuals alike will be used. Consequently, the comb maker, trader, and owner, will often be in the spotlights, as will the comb and the unintended actions behind the comb trade. Technology and material will take centre stage, as well as the idea that artefacts make people just as much as people make artefacts (Marx and Engels 1890).

### 4.1.2 Agency and technology

Traces of technological thoughts in philosophy and anthropology can be said to be scattered over a multitude of theoretical concepts. Central to the idea of *chaîne opératoire* is not only agency, but also Durkheim's (1978) thoughts on how human society imposed acts, thoughts or feelings on individuals. Cognition, according to Durkheim, was not biologically inherited, but passed on through social tradition. Technology and technique should, therefore, be considered a socially determined phenomenon (Sørensen 2006:31). Marcel Mauss (1960) used this line of thought to advocate the idea that technical acts should be understood as social acts. The fact that people from different cultures learn common gestures in different ways, underlined the idea that techniques must be socially learned rather than biological predetermined. The same must then be applied to all human technical actions as well as to the technological process of creating artefacts (Barndon 2002:6; Dobres 2000:153; Sørensen 2006:31). This is in many ways similar to Heidegger's concept of being-in-the-world as awareness of self through technological practice. The cultural significance of objects and the people that craft and use them was argued to lie in the way technical acts and gestures materially unfold in a social milieu (Dobres 2000:155; or see Heidegger and Krell 2008:229-238). Consequently, technology can be said to be enacted through socially organized material practice, in other words, people do not "possess" a technology (Dobres 2000:128).

It was Andrè Leroi-Gourhan who came to be seen as the pioneer of *chaîne opératoire* (Sørensen 2006:32). Even though he rarely mentioned the term *chaîne opératoire,* focusing instead on showing people his idea of its use, his book "*le geste et la Parole"* places emphasis on the evolutionary sequences of artefacts (see Leroi-Gourhan 1964). Through drawings of countless production cycles and evolutionary sequences, it is easy to recognise the concept behind *chaîne opératoire*, as he also emphasized the importance of seeing artefacts within a life cycle, and in light of their function (Sørensen 2006:32).

As with agency theory, *chaîne opératoire* is a concept that needs to be tailored to the material you want to study and it is important to know ones conceptual framework before setting up such a study. If not, one could assume that the results end up being antithetical of what was initially expected (Pelegrin 1990:119). Thus it is important to note that *chaîne opératoire* is both a method and a theory (Barndon 2002:7), and considerations needs to be taken accordingly.

## 4.2 Constellations of Knowledge

Anthony Sinclair (2000:196) defines technical action as social agency, since "technology is one of the social processes by which individuals negotiate and define their identities". Moreover, just as one can identify a relationship between technology and individuals, one can also identify important relationships between technology and the tools and techniques that the tools harbour. At the same time, both the raw materials and the desired end points can show important factors in the agency of the material culture (Sinclair 2000:200). This is summed up in what has come to be called a ”*constellation of knowledge*” (fig. 9). Originally created by Janet W. D. Dougherty and Charles M. Keller (1982) as a way of describing how a blacksmith would think before deciding to create an object, it is a diagram containing the elements needed to create said artefact i.e. the knowledge of the individual. When creating an artefact, craftsmen use their knowledge to envision what they want to create, and from this vision they decide on appropriate techniques, implements, and raw material for the construction of the artefact. By studying such a constellation, Sinclair (2000) tries to identify different types of soletrean Stone Age tools, by applying what knowledge he has of the technology behind the tools to the constellation he identifies what he calls salient qualities and links between the constellations. These qualities (e.g. perseverance, boldness and adaptability) defines the person behind the artefact, their aims and character, just as much as how the artefact was intended to be used (Sinclair 2000).

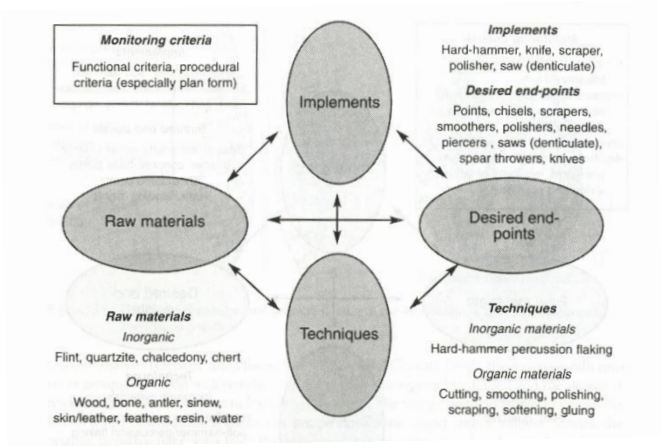


**Figure 9: Example of constellation of knowledge (illustration from Sinclair 2000:203).**

A similar approach will be used in this thesis, concerning the combs from Iceland. Though the method is still fairly new and unused, it is my belief that by identifying the constellation of knowledge behind the combs, it will be easier to locate similarities (or dissimilarities) between the Icelandic Viking Age combs and combs found in other North European regions. Considering the nature of the artefacts that will be used, and the difference in age and culture, deviation from Sinclair’s thought process (fig. 9) will occur (fig. 10). For instance, the crafting of the artefact is not the only important aspect of this study. The way the artefact is

deposited is equally important, as is the region the comb originally came from. The comb can thus be said to travel through the constellations of three different people; that of the craftsman, the trader and the owner. These three people and their constellations will be taken into consideration as we are tracing the comb from its final resting place, back to the place it was initially constructed. In this way I will attempt to unlock the secrets behind the creator, trader and user of the Icelandic combs.

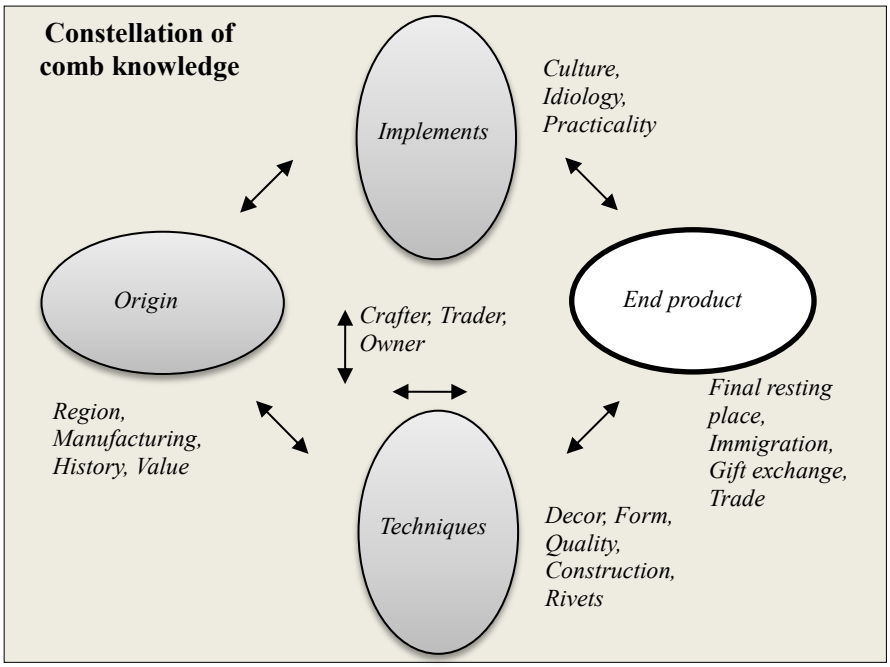


**Figure 10: Constellation of knowledge regarding combs.**

### 4.2.1 Constellations of comb knowledge

To help me analyse the material, I have selected three important analytical and technological steps in the life sequence of the comb. These are all features that can be studied from the available comb remains and what is known of its deposition. By studying them, one can unlock other features, which again might point to the cultural aspects and origins of the comb. For instance; a riveting technique may point to a specific culture, then to a region, then to a possible reason for a comb being traded. These three features can then in reverse, describe the *habitus* of the craftsman, the trader, or the individual the comb was meant for. As such the constellation portrays how an individual both create structures and is structured by giving a comb its own inherent *habitus*. Consequently, this may then reveal the region in which the comb was constructed and its cultural affinity. Thus to unravel the life behind the artefacts, tracing their paths to their place of manufacture, it becomes natural to begin with the end of the combs life sequence.

**Final resting place:** This implies the place the artefact was lost, deposited, or destroyed. This specific place can give us important cultural information regarding the artefact. For example,

what is the cultural difference between a comb found in a grave and a comb found in the remains of a house or a midden? As it is assumed the combs from Iceland were imported (Mehler 2007:233), you could wonder if this would result in a comb being valued higher in Iceland than it would have been in other northern European regions. Being buried with a comb may then have been a way to flaunt power and wealth. On the other hand, a comb carelessly dropped in a midden can be seen as a significant decrease in the cultural value of the comb itself. The resting place will thus become increasingly important throughout the analysis, when further aspects of the combs have been discovered. This step can be seen as the end product for the owner of the comb, and should be considered their cultural knowledge of what to do with the comb when their life ends, or, if they choose to deposit it in any other way, when the cultural value of the comb is transferred to another person or no longer valid, i.e. it is broken.

**Craft:** As the major technological step, this covers three of the most important factors of the study: the décor, the form and the purely constructional properties of the comb.

When considering décor, it is first important to note the type of décor on the comb. Some combs completely lack décor, some are covered with point circles, some have incised décor. Some are so richly décorated that the décor covers the entirety of the comb. This is important when thinking of how well the décor was executed, as the incised décorations can give us important information on where the comb was made, or even who made it (Ashby 2005:259). An example of this can be seen on the combs from the Oseberg excavation (see Unimus 2013), where the incised décor on the comb is so well executed that it would have taken a master comb craftsman a long time, and a steady hand to make it. Only when all of the material has been studied, will it be possible to see the small differences in the décor. As it is often believed that stylistic change occurs by the "principle of least difference" - in other words, in order to establish something different, the least amount of modification will be done to the original décor (Gell 1998).

The form of the comb is paramount to identifying the comb according to one's chosen typology. I have already outlined specific traits regarding five comb types in Ashby's typology. These were presented in chapter 3, and the most important regards the section and profile of the comb. These traits reveal the potential area of construction and may also give away unintentional aspects in its construction, for instance how the rivets are set. However,

these aspects have been described in detail in both chapter 2 and 3, and as such, will not be outlined any further.

Key to the construction of the comb is quality. Ashby (2005:259; 2011b) explains that difference in the quality of comb crafting, may have implications for the organisation of the comb-making industry and its means of distribution. To analyse the quality of combs, he mentions that a subjective method is likely to be of greatest utility when we try to "consider the variables that combine to form a "good quality" or "poor quality" comb" (Ashby 2005). Thus the question is: How do we differentiate between the two? As discussed in the above part concerning décor, the lines and incised décoration can help us discover the quality of the comb as well as the identity of the craftsman. Similar approaches can be done to the symmetry of the comb, how well the teeth are made and arranged (Hoftun 1993:13), and its use of rivets (Clarke and Heald 2002). It all sums up to how well the different parts of the combs are put together. Are there any distinct similarities or differences between how the Icelandic Viking Age combs and combs found in other North European regions were crafted?

**Region:** The region the comb originated from is difficult to establish before a thorough study of the combs have been completed. Even after the technological aspects of the combs have been mapped out, it might prove difficult to establish a certain point of origin. Consequently, a comparative study will serve as the final part of the analysis, and be used on the combs that prove to be ambiguous. Considering how the region in question can the tipping point in establishing a cultural affinity, it is important to use the comparative study to ascertain the place of origin.

These three categories all point to the importance and value of the end product, and hopefully, where it originated and its inherent cultural affinity. They will also point to the personal qualities of the person crafting the comb, the trader who is responsible for the transportation, and the person the comb is meant for. It is from the virtue of this specific context in which the crafter/trader/owner is situated in, that he gives meaning to and takes meaning from his material experiences. From this meaning he derives qualities such as knowledge, skills and techniques on which he can rely to make his way in the world (Dobres 2000:150). Thus the question regarding the salient qualities presents itself again. What kind of salient qualities can we find in the comb material? Certainly there will be different qualities to different types of combs, and if we follow Ashby's (2005, 2011b) idea about the

distinct difference between good quality combs and poor quality combs, we can divide the salient qualities into two groups; one for the poor quality combs and one for the good quality combs. The same could be said for the technique behind the décor, the knowledge of its value and of course the importance of the comb itself and where it was deposited. Thus we have several important factors which need to be looked at.

### 4.2.2 Picking the combs apart

When doing a technological study there is no such thing as too much information, seeing that as much information as possible is needed to be able to decipher the meaning behind an artefact, and to distinguish between groups of artefacts. The construction of combs is divided into many stages that can be broken down and studied in their own rights, so careful consideration must go into how you choose to handle the information gathered. I have decided to establish groups based on eight different aspects of the combs' construction and life:

**Deposit:** Detailed description of where the comb was found.
**The entirety of the comb:** Length, width, height, tool marks.
**The connecting plates:** Length, width, height, tool marks, form.
**The teeth of the comb:** Length, width, height, number of teeth, distance between each tooth, number of teeth to each tooth plate, unevenness.
**The décor on the comb, excluding rivets:** Detailed description of the décor, depth and width of the incised décor, symmetry.
**The end plates:** Length, width, height, included in teeth?
**The rivets:** Number of rivets, material, diameter, arrangement, are the rivets part of the décor?
**Parallels:** Identifying similar combs from other regions to compare with ambiguous combs in the Icelandic material.

Each comb will be studied after these criteria, and subsequently analysed.

# 5. Combs from Iceland

In this chapter I will present the material and its context, starting with a general introduction to Iceland in the Viking Age. Thereafter, I will present relevant information concerning each settlement and grave as well as providing a basic outline of each comb's context. Finally, a prelimanry timeline containing all the combs, will be established to provide some groundwork going into the analysis. The previous chapter introduced the importance of the final resting place of the combs, and this chapter will be based to some degree on this concept. As such, what follows will be a primary look at the relevant contexts surrounding the combs, which will be examined in-depth in the next chapter together with the physical attributes of the comb.

In total, the material for this study consists of 49 combs, fragments and comb cases (fig. 11 and 12); 29 which have been found at three settlements situated near Lake Myvatn in northern Iceland, and 20 which have been found in Viking Age graves scattered across Iceland (fig. 13). The entire Icelandic Viking Age grave material is included in this study, but 4 burial sites were excluded due to varius reasons which will be outlined in section 5.3. The comb material from the settlements originates from three selected sites. These have been selected based on the availability of the excavation reports and the sites' close proximity to each other. Based on the available literature, I estimate the total amount of combs found in Iceland to exceed 60, which includes combs from medieval period contexts, loose finds, and unpublished excavations. The majority of the material has been studied in detail, although some of the artefacts were a part of the Icelandic National Museum's Viking Age exhibition, and as a result, my studies of these were limited to visual estimates.

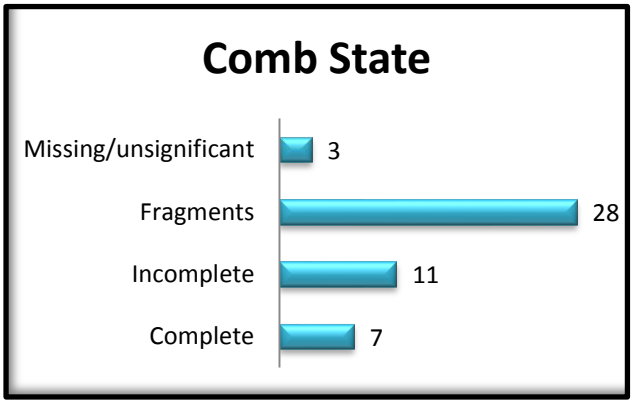


**Figure 12: An overview of the state of the combs from Iceland (N=49).**

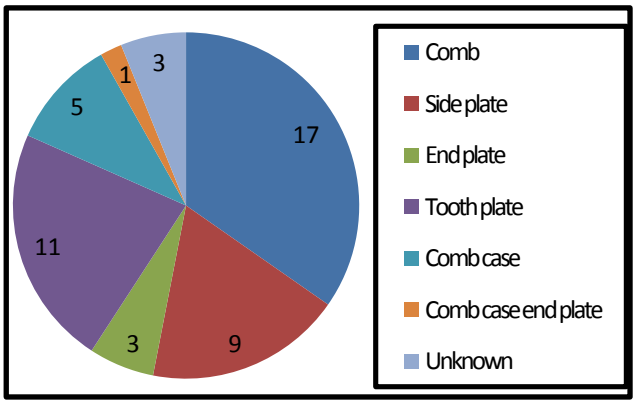


**Figure 11: The Icelandic combs divided into groups based on their current definition (N=49).**

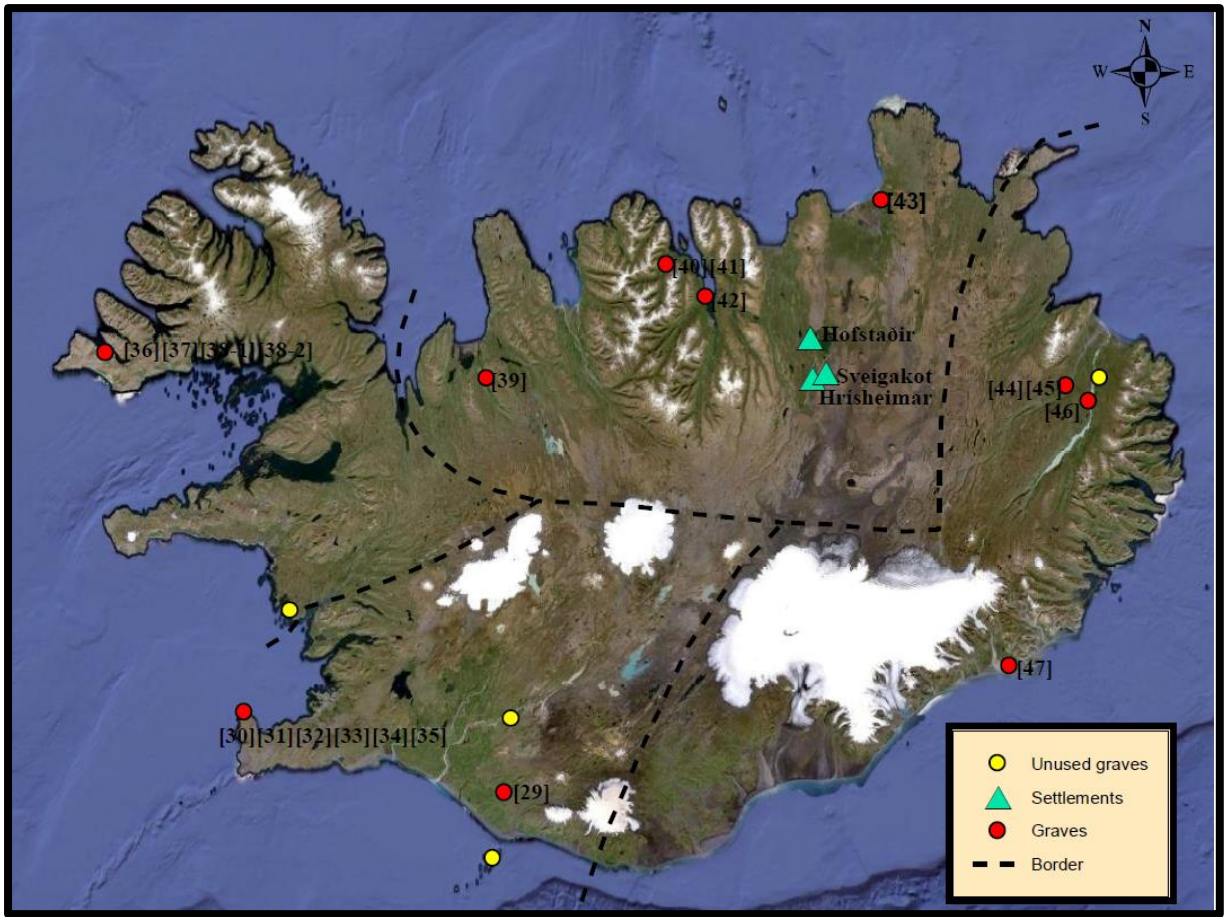


**Figure 13: Map of Iceland, showing the three settlements and all of the graves containing combs, with reference to the catalogue. Map taken from google.com and edited by the Author.**

## 5.1 An introduction to Iceland

### 5.1.1 Iceland in the settlement period

It is generally acknowledged that Iceland was primarily settled by Norwegians arriving either directly from Norway, or from the North Atlantic colonies, Ireland and Scotland (Byock 2001:8, 83-84; Einarsson 1994:42; Price and Gestsdóttir 2006:130; K. P. Smith 1995:320, 331). There have been discussions regarding the role of the Celtic and Gaelic people in the settling of Iceland, but even though there is reason to believe that some of the settlers were of Celtic origin (Price and Gestsdóttir 2006; Williams 1993), there is little to no evidence in the archaeological settlement material to attest this (Byock 2001:9; Einarsson 1994:48). There is, however, evidence in the DNA of the present Icelandic population to assume that a large part of the menial population in Iceland came from Great Britain and Ireland (Donegani, et al. 1949:151). Especially the female population in Iceland contains the Celtic DNA strand (Bjarnason, et al. 1973; Donegani, et al. 1949; Williams 1993:169), and one may wonder if this could be mirrored in the comb material. Furthermore, the fact that the Celtic strain is rare in Eastern Iceland has made people suggest that the original settlers in that region came

directly from Norway (Williams 1993).

According to Ari the Wise, the author of Íslendikabók, the Icelandic settlement period began in 874 AD, and although there have been attempts to document earlier settlements (e.g. Hermanns - Auðardóttir 1986, 1991), it is still common consensus among today's archaeologist that this date is fairly accurate (Vésteinsson 2001c:2-3). According to the sagas, the first immigrants settled from the southwest and gradually moved across Iceland (K. P. Smith 1995:327-328). These immigrants would establish estates in wetland areas which could be inhabited by a large number of people and contain a wide and varied economic base (Vésteinsson 2001c:26). The first settlement phase would be followed by a planned settlement phase of less accessible areas which could be rented out or sold to new arrivals (Vésteinsson 2001c:21, 26). The earliest farm often consisted of several buildings, with a turf-walled residential longhouse, serving as the main feature of the farm (K. P. Smith 1995:328). Other buildings that often featured next to the longhouse were pit-houses, smithies, barns and byres among others. At first, these settlements would shelter more than one family, but eventually they would split up as each family founded their own farm. Orri Vésteinsson (2001c:10) suggests that people may have settled along the coast at first, but would later seek out areas where animal husbandry could be subsided by hunting and fishing. Consequently, they would travel inland, from the coast of Iceland, following rivers to seek out places where fish could be caught throughout the winter (Vésteinsson 2001c:10). The Icelandic society was mainly pagan and until the conversion to Christianity in 1000AD, the Icelanders were buried in mounds or shallow graves, some distance from nearby settlements (Eldjárn 1953:65-66; Price and Gestsdóttir 2006:136).

By the 10$^{th}$ century, Iceland had been divided into four administrative quarters, each quarter overseen by nine chieftans (goði) (Friðriksson 1994:105-106). These chieftains would meet in regional tings where regional disputes would be tried and settled. The national assembly, incorporating all of the chieftains, was held at Þingvöllur where bigger feuds were settled (Friðriksson 1994:105). For practical and theoretical reasons, I will keep to these administrative regions for the rest of this thesis when providing context to the comb material.

### 5.1.2 Tephra

An important part of any archaeological dig in Iceland is what has been known as tephra layers. Discovered by Sigurður Þórarinsson in the 1940s, these are volcanic layers from

eruptions that have spread across the whole of Iceland, giving solid points of dating throughout the Icelandic prehistory (Karlsson 2000:13). Three of these layers are important to this thesis, and have been used to date settlements in Iceland. The first has been called the "landnámslag" or settlement layer, and has been dated to 871±2AD, based on dates from ash found in one of Greenlands glaciers (Karlsson 2000:14). Most settlements can be found above this layer, which again coincides with what is said in the landnám saga (Sigurgeirsson, et al. 2013:1). The second layer was discovered during the excavation at Sveigakot and has been dated to 950AD (Vésteinsson 2001b:9), and although termed Veiðivötn layer at first, it has later been given the name V-Sv (Sv for Syðrivogar and Sveigakot) (Sigurgeirsson, et al. 2013:9). The third and final layer has been named after the volcano Hekla and is dated to 1158AD (Sigurgeirsson, et al. 2013:5). No comb is older than "landnámslag" or younger than the Hekla layer

## 5.2 Combs from settlements

In the three settlements selected for this study, there has so far been found 29 combs, cases and fragments; 8 from Hofstaðir, 11 from Sveigakot and 10 from Hrísheimar. As stated, the settlements are situated in the northern part of Iceland close to Lake Myvatn. Consequently, I have decided to focus explicitly on this fact, as I argue the comb remains provide material insight into the origins of the settlers of the northern region. Comparisons will then be drawn to the grave material both in the region, and outside of it. Previously I pointed out the importance of fishing as a means to provide sustenance through Icelandic winter and as such, it is no surprise that people settled near Lake Myvatn were there was also ample opportunity for sheep to graze, as well as a rich bird life (Vésteinsson 2001c:10). The selected settlements all lie near the lake, but present three contrasting social and economic units: Hofstaðir is thought of as a chieftans settlement (Lucas 2009a:400); Hrisheimar is described as being a fairly wealthy farm considering the amount of iron production facilities excavated (Edvardsson and McGovern 2007:16); Sveigakot has been interpreted as being poorer farm than the two former (Edvardsson and McGovern 2007:16; Vésteinsson 2001b:12). To be noted is that no final publication has been released on Sveigakot or Hrísheimar. Hence, the information regarding the structures, artefacts and general lay-out of the sites, have been taken from interim reports. Following, I will outline each settlement's context, as well as each comb's individual context within the settlement.

### 5.2.1 Hofstaðir

The Viking Hall of Hofstaðir is dated to the 10th-11th century, and is thought to have been abandoned in the 11th century. It lies to the west of Lake Myvatn, in the northern part of Iceland next to the river Laxa which was one of the main inland-coast routes (Lucas 2009a:402). The hall itself was for a long time considered as some sort of Norse temple, but later it has been redefined as a chieftan's settlement (Lucas 2009a:400). The settlement's history is divided into six phases. In phase I (940-980AD), the settlement contained 3 structures, the ailed hall itself (AB), a pithouse (G) and a smithy (A5). In phase II (980-1030AD) the pithouse was abandoned and used as midden dump, and new structures were built (A2, C2, D, E1, E2), including a new and larger smithy (A4). In phase III (1030-1070AD), most of the structures were gradually abandoned (Lucas 2009b:165-166). The three latest phases are not relevant to this thesis.

The 8 combs found at Hofstaðir belong to phase I and phase III (Batey 2009:290). The material dated to phase I were found in pithouse G (Batey 2009:290) and consists of four different comb pieces. The pithouse is thought to have been abandoned no later than ca. 980AD (Lucas 2009b:100) and Gavin Lucas (2009a:393) notes that it "… was clearly a room where weaving and probably spinning occurred but may also have been used for sleeping and eating." The group from phase I comprises of a complete comb [1], a tooth plate [5], a part of a comb case [4], and possibly the endpoint of a comb case [3].

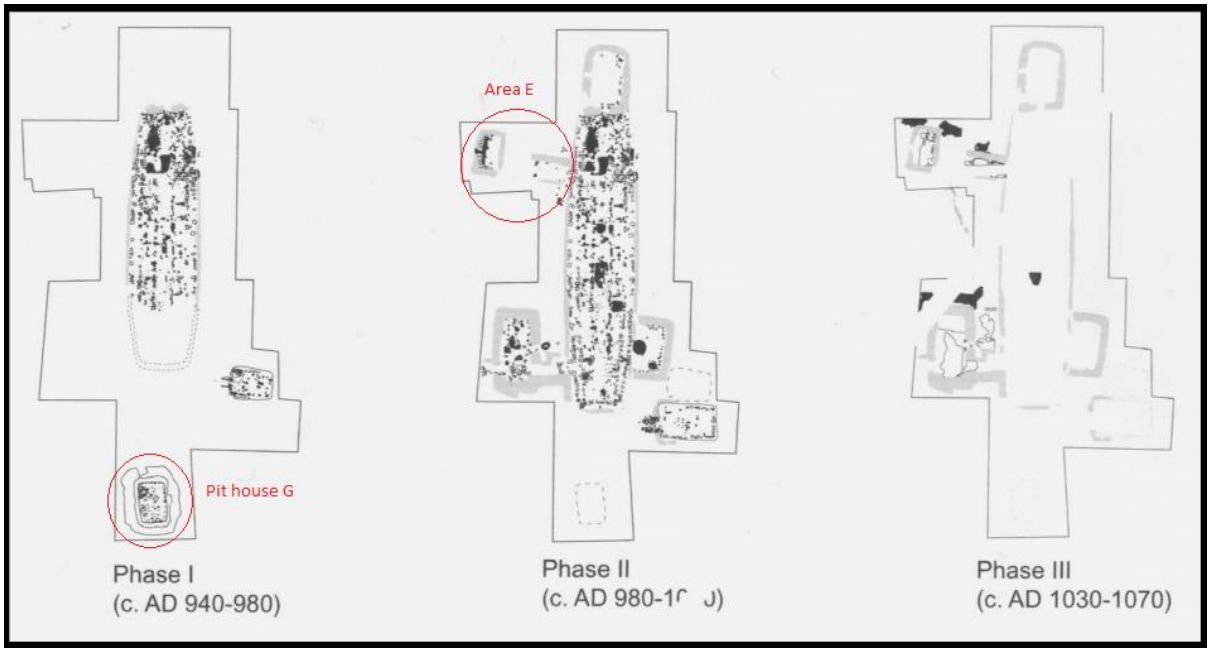


**Figure 14: Hofstaðir phase I-III (illustration from Lucas 2009:166, edited by the Author).**

The complete comb was found in the bottom layers of the pit house and was therefore most likely either intentionally left there, or forgotten when the structure was abandoned and fell apart. It is in a very worn condition, indicating a long artifact life (Batey 2009:289). The three remaining pieces dated to phase I, were all found in layers dumped on the structure shortly after the ruined collapsed and in the following period of intensive dumping (Batey 2009:290; Lucas 2009b:102-103). As such, the pieces would most likely have been broken prior to being dumped, and having lost its value, been discarded by the inhabitants of the hall.

One more comb [7], is mentioned as being a part of phase I, but it provides somewhat of a problem. The layer it was found in belongs to phase II, but the comb listed in the report is claimed to be from phase I. It is however a difficult layer, as it is noted that "… inside the ruin it can be treated as a coherent and final accumulation of material, but as it fans out on the edges and beyond, it is almost certainly a more composite and re-worked layer of all the successive dumping and erosion of material represented in the midden" (Lucas 2009b:140). However, contrary to comb [1], it was found in the topmost stratigraphic layer, indicating that it had been tossed out. This, however, is strange, as the comb is in better shape than comb [1], and as such, one might believe it to have been dumped there by accident.

Two comb pieces [6][8], were found in area E, and are dated to phase III. Area E is made up of two structures first constructed in phase II; E1 which was a porch or entrance on the north side of the longhouse, which led to E2, defined as a latrine. The comb remains were found in a layer with turf/pertash and wood ash dumps, which also implies that this area was used as a place to dump the remains from the hearth in phase III (Lucas 2009b:148). Contrary to the comb pieces found in pit house G, these have been identified as being made of bone (Batey 2009:290), and are the remains of a tooth plate and an end plate. Finally, there is one piece [2] which could not be located in the reports, but can be described as a small part of a connecting plate.

### 5.2.2 Sveigakot

To the south of Lake Myvatn lies the Viking Age farmstead of Sveigakot. The name Sveigakot was, however, most likely not the original name, as it draws its name from the swathes grasslands nearby, a feature which would not be as distinct in the Viking Age (Vésteinsson 2001a:5). According to tephra layers, the farm dates back to the 10th century with occupation starting shortly after 871+-2AD (Vésteinsson 2001a:9). The site's age was contemporary with Hofstaðir, but the size of the farmstead has indicated that it was of lower status (Vésteinsson 2001a:12). Its history is divided into 7 phases, the four first phases being relevant to this thesis. These phases range from 871+-2/950AD to the mid to late 11th century AD (Vésteinsson 2005a:52). The farm consists of six main areas; S, M, N, MP, MT and T (fig. 15).

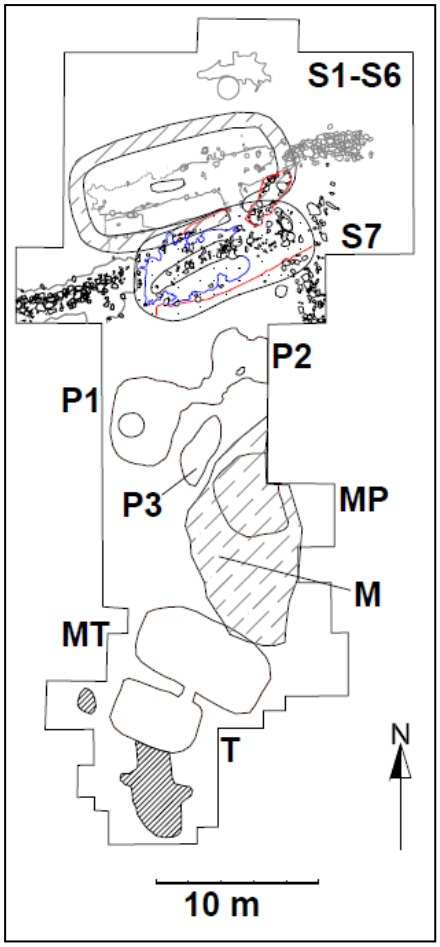


**Figure 15: Overview of excavated areas at Sveigakot. (illustration from Vésteinsson 2004:5).**

The southern area is most notably defined by the two pithouses T and MT. Constructed in phase I, they were gradually abandoned in phase II and pithouse T was eventually turned into a midden towards the middle of the 11th century (Vésteinsson 2005b:51-52). Of the 11 comb fragments found at Sveigakot, 7 were found in this area. The excavation started in 2000, when they initially excavated a 4 x 5 m test square. Four comb pieces where found, consisting of three pieces from phase III and one piece from phase I. One of the pieces [9] is missing, but can be described as a tooth plate with half a rivet hole on one of the edges. Of the remaining pieces, there is a connecting plate fragment [17], and an end piece fragment [11], both which could not be located in the reports. The last piece is an incomplete [10] comb, broken at the middle. The piece recovered from phase I, is a part of a connecting plate [16]. In 2001, two more comb pieces were found. These consisted of an incomplete comb [13], and a comb tooth plate [14]. Both have been dated to phase I of pit house T, based on the authors interpretation of the reports.

One piece [15] was found in area MP. This area is yet to be fully excavated, but the interim

reports suggests it to be a part of a pit house with 4 x 4,5 m dimensions (Gísladóttir and Vésteinsson 2005:24). The piece is dated to phase III, and is a part of a connecting plate with remains of a tooth plate. One rivet is holding it together, and it has traces of vertical line décor.

The last comb pieces [12][18], were found in area S. The construction of the wall in the structure has been dated to just after 950 AD, suggesting a Viking Age date (Milek 2001:50), although one of the structures show evidence of an earlier domestic occupation (Milek 2002:21). The area is believed to be the main living house in the 11th century AD (Milek 2001:61). A small piece of bone with an iron rivet [12], was found during the excavations in 2000. The layer the piece was found in dates to phase IV, i.e. the final phase of the structure (11th – 12th century AD), and is defined as the thickest and most extensive of the occupation deposits (Milek 2001:57). A tooth plate [18] was found in context 1055 in S3 which can be considered an ash dump, although it was probably deliberately dumped there, and not a fire place (Gísladóttir and Vésteinsson 2004:16). The piece is dated to phase IV. One last comb piece has been found at Sveigakot and is defined as a single sided tooth plate [19]. The piece is, however, not listed in any of the reports and it is labeled as having an unknown context, phase, and area.

### 5.2.3 Hrísheimar

To the south-east of Lake Myvatn lies Hrísheimar (fig. 16). Surveys had already started in 2000, but the excavations did not begin until 2003 (Edvardsson 2003:3). The excavation was divided into 7 areas; A, B, C, E, H, L and Q (Edvardsson and McGovern 2007:5). Areas important to thesis are E and L, where 10 combs and pieces have been found. These two areas would also in 2006 reveal three different structures; C, D and S. The farmstead was most likely abandoned due to a overproduction of iron, which used up the surrounding trees, opening up the area for rapid expansion of erosion across the landscape (Edvardsson 2003:25). The farmstead was settled in the first part of the 9th century and the occupation covers two phases; phase I 875-950 AD, and phase II 950-1020 AD (Edvardsson and McGovern 2007:4, 14, 16). It is thought to have been at least moderately wealthy, on basis of iron production and the evidence of a pre-Christian elite burial close by (Edvardsson and McGovern 2007:16).

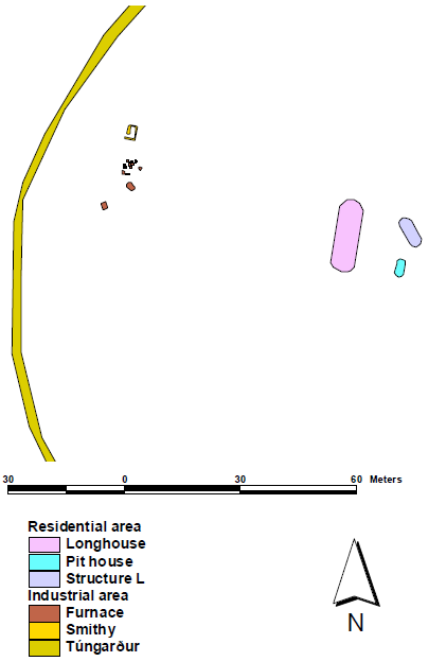


**Figure 16: Overview of the industrial and residential areas at Hrìsheimar, and the fence enclosing the fields from the wilderness (Túngarður) (illustration from Edvardsson 2003:35).**

During the first excavation of area L, one complete comb [20] was found in a midden (Batey 2003:15; Edvardsson 2003:9). It was found in context 045 and can be identified as single sided composite comb. C14 dating was done one cattle bone from the same context, giving it an age of 1120+/-35 BP (Edvardsson and McGovern 2006:13). In 2004, four new comb pieces were found in area L (Batey 2005:13). Most distinct are two connecting plates [21-1][21-2]. The first [21-1] has a shape that is difficult to establish, but it looks like it could have been plano convex. The second connecting plate [22-2] has an unusual oval form. It has the saw marks and rivets that define it as a comb, but the shape is not consistent with other Norse types. Another connecting plate piece was found [24], with what can be considered as "Y" decoration. The two remaining pieces [22][23] are tooth plates. All of the pieces were found in midden dumps or ash deposits (Edvardsson 2005:25).

Area E was dug in 2005 as an expansion of area L dug the year previously. Two comb pieces were found; an endplate [26] with parts of the connecting plate attached, and a tooth plate [27]. The structures in area L and E had all been abandoned for some time prior to the fall of the V-Sv 950 tephra, and were partially filled with midden material when the tephra fell. These structures are thus dated to the first phase of the settlement (Edvardsson and McGovern 2006:6).

In 2006, area L and E were expanded, and revealed the complete forms of what would be called structure C, D and S. One complete comb[25] was found in structure C below the V-Sv 950 AD tephra layer (Edvardsson and McGovern 2007:15). Structure C is defined as an early constructed pit house, but it was abandoned and later used as a generalized garbage dump. (Edvardsson and McGovern 2007:9). The same year, pieces of a connecting plate was found together with a matching tooth plate [28].

## 5.3 Combs from graves

To this date, over 300 Viking Age graves have been found in Iceland. 17 of these graves include combs, and a total of 24 combs, cases and fragments have been found. However, only 20 of these are presented in this study, and these can be found in 14 different graves spread out over 10 burial sites. The four remaining combs had either been lost after the excavation of the grave took place, or were not considered to be combs. All the graves have been dated to the Viking Age, based on artefact analysis, comparing the available grave material to Scandinavian Viking Age material (Eldjárn 1956:297-298, 394-396). The distribution of graves is mainly to the north, south and north-east part of Iceland, and only few are found sporadically across the western part (Friðriksson 2000:591). Adolf Friðriksson (2000:591) mentions several reasons for this, such as soil erosion and road construction, although he also notes that the western part of Iceland could have converted to Christianity at an earlier date, thus limiting the number of pagan graves in the area. He does, however, note that such assumptions must be made with care. Contrary to practice in other Nordic countries, all of the Icelandic graves are inhumations (Friðriksson 2000:594). The typical Icelandic grave is a shallow pit, surrounded by stones and covered by a low mound of soil and boulders (Friðriksson 2000:609). As with Viking Age graves in Scandinavia, they often carry grave goods, but the elite burials found in Sweden, Denmark and Norway, do not appear (Eldjárn 1956:68). Moreover, tools are noticeable by their absence in the Icelandic graves, an aspect which will be elaborated later.

In what follows, I will lay out the relevant context of each comb in the Icelandic Viking Age grave material. This will be done in sections based on the administrative regions previously outlined: south, west, north and east. These four regions will then serve as contextual zones for each burial site. Any aspects to the grave, besides the comb, that might point to a clear Celtic or Norwegian influence will be mentioned.

### 5.3.1 Southern Iceland

40 burial sites have been excavated in south Iceland. 4 of these burial sites had graves which contained comb remains, but for reasons explained above, only 2 of these sites have been taken into account. These two sites are situated in Hemla, Vestur-Landeyjahreppur and Hafurbjarnarstaðir, Midneshreppur. In Hemla, two graves were discovered on an eroded hillock and excavated, although only one contained remains of a comb [29]. It can loosely be

defined as a connecting plate with some decoration and four intact rivets. The gender of the excavated skeleton has not been identified, but it was found lying S-N.

The burial site in Hafurbjarnarstaðir can be found west of Reykjavik on the sea shore. This is one of the larger burial sites in Iceland and it was excavated in 1868 and again in 1947. The site consists of nine graves in total, and comb remains were found in four of these. The first of these four graves was a female burial with the skeleton lying ESE-WNW. The comb piece [30] consists of a series of tooth plates belonging to the same comb (Friðriksson 2000:561). The second grave is a double burial containing two skeletons together. No information could be found on the gender of these two individuals, but they were lying in a W-E direction. A comb with copper sheeting [31] and four comb case connecting plates [32][33] were found among the grave goods (Friðriksson 2000:561). The comb piece [34] from the third grave could not be located, but Kristján Eldjárn (2000:97) notes that it was a piece of a single sided composite comb found in a female burial with the skeleton lying in a SE-NW direction. The last comb piece, is a part of a double sided composite comb [35] with copper rivets. The comb was discovered on the site of grave 7-9 but from which grave remains uncertain. Similar combs are often found in Medieval Period contexts which questions the comb's Viking Age date. Hence, a thorough discussion of this piece will be provided in the next chapter. The only other remains from these three graves were bone fragments (Friðriksson 2000:561).

### 5.3.2 Western Iceland

16 burial sites can be found in western Iceland, two with graves containing comb remains, but only one has been selected for this study as major parts of the grave material from the second burial site was lost following the excavation in 1872 (Friðriksson 2000:562). The remaining grave was found in Vatnsdalur, Patreksfjarðarhreppur, in the part of Iceland described as having the least amount of burial sites. The grave lies on the westernmost point of Iceland, and can easily be termed majestic considering the presence of boat remains and a wide array of grave goods. Seven individuals of different gender were found buried in the grave, although Þór Magnússon, who excavated the grave, has argued convincingly that it was originally a woman`s grave with the bones of the other individuals added later, most likely by grave robbers digging up other graves in the vicinity (Byock 2001:295; Friðriksson 2000:564; Magnússon 1966:31-32). Consequently, for the purpose of this thesis, this grave

will be identified as female from now on. The grave was situated E-W but the position of the head is unknown. Three combs [36][37][38-2] and fragments of two comb cases [38-1][38-2] (the find nr. of [38-2] contained both a comb and a case) were found among the grave goods. Other artefacts of note was a bronze bell, which is said to have either an Anglo-Saxon or Celtic origin, and a piece of lead with an inlaid cross (Magnússon 1966:31-32).

### 5.3.3 Northern Iceland

Northern Iceland is by far the region with the most amounts of graves, with a total of 65 burial sites spread across the region. This is also the area where Lake Myvatn is situated, but only 5 burial sites can be found in close proximity to the lake, and none of these sites have graves containing combs. Concerning the whole region, four graves with combs have been excavated.

The first grave can be found in the western part of northern Iceland. It was discovered in Kornsá, Áshreppur in 1879 and contained a female skeleton lying NW-SE. The grave was covered with small stones, which had apparently been covering a now disintegrated wooden cover. The comb [39] can be defined as incomplete (Friðriksson 2000:566).

The two next burial sites can be found in the northern region of northern Iceland. The first can be located in Ytra-Garðshorn, Svarfaðardalshreppur where road construction in 1952 revealed a cemetery with nine graves (Friðriksson 2000:573). Two of these 9 graves contained combs. The first had the remains of a skeleton lying in a SW-NE direction, covered by a layer of stone. Six different pieces remain of the comb [40]. The second grave had the remains of a human skeleton lying in a SW-NE direction. The comb fragment [41] is debatable, 2,8 cm long, and can at best be termed uncertain (Friðriksson 2000:573). Both of these graves had been previously disturbed. Another road construction exposed the second burial site in 1908. The site can be found in Moldhaugar, Glæsibæjarhreppur, and of the two, the second carries a comb fragment. The grave contained a human skeleton lying in a S-N (Friðriksson 2000:577) and the comb piece [42] is a fragment of the end plate of a comb.

The last piece in northern region comes from the burial site in Daðastaðir, Núpasveit, Presthólahreppur, lying north-east in the region. Two graves were excavated and the second one carried comb fragments (Friðriksson 2000:582). These comb remains [43] are, however,

too small and fragmented to be able to give any possible identification.

### 5.3.4 Eastern Iceland

Of the 31 burial sites found in eastern Iceland, 4 sites contained graves with combs. However, for reasons outlined in section 5.3, only 3 of these sites have been taken into consideration.

The first site was revealed by a bulldozer in Hrólfsstaðir, Jökuldalshreppur. Only one grave was found and it had clearly been previously disturbed. It contained a male skeleton lying in a NE-SW direction together with stones and wood remains (Friðriksson 2000:583). Two comb artefacts were found in the grave. The first is a fragmented piece of a small comb [44]. The second consists of 4 separate connecting plates [45] of a comb case.

The second grave from this area was found in the remains of a burial site in Rangá, Tunguhreppur, and the comb and other remaining artefacts were donated to the Icelandic National Museum in 1915. The site consisted only of one grave, and although the remains of a skeleton was found, the direction it was lying in was not reported. (Friðriksson 2000:584). The fragments consists of two tooth plates [46].

The last comb piece comes from a female grave in Álaugarey, Nesjahreppur, in the south-eastern part of East Iceland. The skeleton in the grave was found lying E-W in a low mound without stones covering the grave (Friðriksson 2000:587). The comb [47] is missing both endplates but is otherwise a typical Norse single sided composite comb.

## 5.4 Chronology

In section 5.2 and 5.3 I outlined the general context of each single comb, and in this section I will elaborate on the dating of these combs by placing them in a preliminary timeline (table 1). With this in mind, two important dates in the Icelandic prehistory should be mentioned. First, as previously stated, the date for the Icelandic "landnám", or the year Iceland was officially colonised, is set to 874 AD (Karlsson 2000:14; Sigurgeirsson, et al. 2013:1). This implies that no comb should be older than this date. Second, Iceland was christened in between the year 999 and 1000 AD (Vésteinsson 2000:13), meaning that the amount of pagan graves should decline from this point and onwards. Hence, the majority of the combs from

the Icelandic pagan graves should be dated to the 10th century or earlier, which Kristjan Eldjarn (1956:297-298, 394-396) emphasised with his stylistic analysis of the grave goods. In the introduction I questioned the use of typologies as a sound way of arguing, and this can be illustrated by the preliminary chronology in table 1. The choice of typology can alter the type of the comb thus identifying it with the wrong period. Considering the graves were dated back in the 1950s, when there was a lack of comb typologies, the timeline might give incorrect dates. Moreover, the combs from the settlements have not been studied in detail prior to this thesis and as such, have not been identified other than being defined as Norse types. This problem can be illustrated by comb [31] and [35], which visual estimates suggests are more typical of the Medieval Period, but are still dated to the Viking Age. The analysis in the next chapter will thus focus on a proper identification of the Icelandic combs.

| **Timeline** | | | | |
|---|---|---|---|---|
| **Viking Age:** 12, 18, 20, *29, 30, (31, 32, 33), 34, 35, (36, 37, 38-1,38-2), 39, 40, 41, 42, 43, (44, 45), 46, 47* | | | **Medieval Period:** | |
| **Tephra layer 871±2 –V-SV 950:** 21-1, 21-2, 22, 23, 24, 25, 26, 27 | | | **Tephra layer V-SV950 – 1158:** | |
| | **900-950:** 16 | **940-980:** 1, 3, 4, 5, 7* | **1030-1070:** 6, 8, 9 | |
| | | | **1050:** 10, 11, 13, 14, 15, 17 | **1050-1100:** 18 |

**Table 1: All the combs divided into sections based on their age. The dates are drawn from the reports and publications available prior to the analysis. Comb 2, 19 and 28 are of unknown date. Combs from graves are written in italic. Combs in parentheses were found in the same grave.**

# 6. Picking the Combs Apart

In chapter 5, I outlined the context of each comb and provided a general overview of the settlement situation in Iceland during the Viking Age. In this chapter, I will pick the combs apart and analyze step by step what I have termed the life sequence of the comb. Furthermore, a comparative study will provide parallels to combs remaining ambiguous after the technological analysis. In section 4.2.2, I established the steps which would be of importance for this study. The following chapter will be arranged in a similar order, beginning with an in depth look at the final resting place of the combs, compare them, and see if there are any common characteristics in how and where the combs were deposited. The second and third part will be a comprehensive study of the decorative and constructional properties of each comb. Finally, I will describe the comb cases in detail, and sort the eligible Icelandic combs into Ashby's typology assisted by the use of comparative material. When needed, references to Ashby's typology will be provided, giving a basis for dividing the material. An updated chronology will lead way into chapter 7, where the results will be discussed.

## 6.1 Final resting place

I have previously identified the context of each comb and the location in which they were discovered. This location, termed the final resting place, is important for how we estimate the value of each comb and how it could have influenced its own habitus. In order to lay down a foundation for identifying these traits, the previously explained locations and contexts of the combs will be elaborated on. Consequently, I have split this section into two different parts: the first will sum up and analyze the different contexts combs have been found in; the second will provide comparisons of combs found in male and female graves.

### 6.1.1 Deposit

Deposit describes both how and where the combs were deposited. Since half of the comb material has been taken from Icelandic Viking Age graves, it is fairly straightforward to identify their deposit. In contrast, the other half provides some complications, considering the amount of different ways artefacts can be deposited within a settlement (e.g. Andrén 2005;

Hamerow 2006:112-113; Larsson 2007). In chapter 5, I outlined the location of each single comb and an overview of these can be found in table 2. I consider combs found in middens or ash dumps to have been discarded due to being broken, or lost by accident. Combs found in structures may have been forgotten, lost, or left there on purpose when the structure was abandoned. During the Viking Age it was not unusual to, for instance, deliberately deposit artefacts in post-holes (Andrén 2005:117; Løken 2001:70,78). However, none of the combs from the settlement material show evidence for such practice. Combs from graves, on the other hand, carry a different meaning as one could assume they would either have been part of the personal belongings of the deceased, or grave goods given by family, friends or followers (Eggen 2007; Petersen 1951:489; Sjøvold 1974:237-238; Töpfer 2010). Consequently, I argue they should be allotted a different value, considering the ideological aspect of leaving artefacts behind as grave goods.

| | Grave | Pit house | Ash dump or midden | Hall, house | Uncertain |
|---|---|---|---|---|---|
| **Comb:** | 29, 30, 31, 32, 33, 34, 36, 37, 38-1, 38-2, 39, 40, 41, 42, 43, 44, 45, 46, 47 | 1, 9, 10, 11, 13, 14, 15, 16, 17, 25 | 3, 4, 5, 6, 7, 8, 18, 20, 21-1, 21-2, 22, 23, 24 | 12, 26, 27 | 2, 19, 28, 35 |
| **Total** | 19 | 10 | 13 | 3 | 4 |

**Table 2: Directory over the Icelandic combs based on the context of their discovery.**

It is interesting to note that 10 comb pieces were found in pit houses. These houses were often used for textile production, and evidence for weaving implements found at the majority of the pit houses in Iceland supports this notion (Milek 2012:104). As a consequence, pit houses can be understood as gendered spaces, as weaving and textile production is strongly linked to the female gender (Milek 2012:120). That comb remains are found in pit houses in Hofstaðir, Sveigakot and Hrísheimar, seems, however, coincidental, as no traces of combs were found in any of the other pit houses located at farms in Iceland (Milek 2012:104). Nonetheless, it highlights that these combs should be linked to the female gender, especially when taking into consideration that they all seem to date to the pit houses' phases of activity, and are not a product of later disposal.

The fact that 13 combs have been found in ash dumps or middens provides the basis for some interesting arguments. The number is too high to indicate that they were accidentally lost, and

two of the combs [7][20], unless they were deposited in the state they were found, can hardly be considered as being broken beyond repair. If it was difficult to acquire combs through trade on Iceland, one could hardly imagine them being discarded on purpose. This raises many questions, and a discussion on the subject will be provided in the next chapter.

### 6.1.2 Gender and graves

In section 5.1.1, I outlined current theories on the origins of the first settlers of Iceland. In light of these theories, a general comparison between the combs and the gender and geography of each grave, can provide interesting results, considering how different cultures used different types of combs.

Of the 20 combs and comb cases in the Icelandic Viking Age grave material I have selected for this study, 8 are from identified female graves and 5 from identified male graves (table 3). Double or multiple burials do not occur. It is important to note that one should be careful when gendering combs just based on the gender of the deceased. The comb could have been a funeral gift from a partner as a remembrance on the way to the afterlife, or it may have changed cultural value when transferred from the living world to the afterlife (Töpfer 2010:71-72). Nonetheless, a gender based division may still provide interesting results.

| **Male graves graves** | **Female burials** | **Uncertain** |
|---|---|---|
| 29, 40, 42, (44, 45) | 30, 34, (36, 37, 38-1, 38-2), 39, 47 | (31, 32, 33), 35, 41, 43, 46 |

**Table 3: List of combs based on female and male burials; combs in parentheses are from the same grave.**

Table 3 shows that there is an equal amount of combs from male and female burials. This is in contrast to the comb material from the Norwegian Viking Age, where a higher percentage of combs is available from female graves, compared to male graves (Petersen 1951:489). In this way the Icelandic material demonstrate a heightened similarity with, for instance, Birka. Here Ambrosiani (1981:89) concludes that even though the majority of the combs can be found in female burials, the predominance of female graves suggests combs were percentagewise, no more common in female burials than in male. No further conclusions can be drawn from the division of combs based on gender before further studies regarding decoration and construction of the combs has been done.

## 6.2 Decoration

As the combs' function as religious and ideological items has often been colored by its décor as well as its deposition, the decoration of a comb has often come into attention (e.g. Eggen 2007; Hoftun 1993; Smirnova 2005:47-76). Their ability to mirror the skills of craftsmen should not be underestimated, nor the affect it has on its owners. Following, I will describe the decorative side of each Icelandic comb.

In section 4.2.1, I outlined certain factors which can be understood to defining a comb based on its decoration, and these will be used to identify the qualitative or quantitative sides of the combs. As with most artefacts, it can be difficult to identify fine decoration, considering the item may have deteriorated or lost its décor as a result of wear and tear. Because of these reasons, this analysis should be considered subjective.

| Type | Comb | Total |
|---|---|---|
| **No decoration** | 36, 37, 44 | 3 |
| **Vertical** | 2, 15, 21-2, *26*, 38-1, *40*, 42 | 7 |
| **Ribbon and vertical** | *32, 33*, *39* | 3 |
| **Diamond and vertical** | 1, 7, 13, 16, *25*, *47* | 6 |
| **Diamond, ribbon, and vertical** | *4* | 1 |
| **Diagonal and vertical** | *10*, 21-1, 28, *29*, | 4 |
| **Other** | *20*, 24, *31*, *35*, 45 | 5 |

**Table 4: The combs broken down into groups based on decoration. Numbers in italic have horizontal lines as well as the other decoration types.**

Certain types of décor have often been highlighted in discussion on combs. Firstly, most combs have either horizontal lines following the edge of the connecting plates, or vertical parallel lines across different sections of the plates. Second, point circles, ribbon ornamentation and diamond décor (an effect created with diagonal lines), are primary decoration variants from Norse Viking Age comb material (Ambrosiani 1981:62-64; Smirnova 2005:47-76). In view of the Icelandic material (table 4), all the connecting plates, except the plates from four combs [31][35][36][37], display evidence of vertical lines. Horizontal lines are slightly less common. Out of the 26 combs that have parts of their connecting plate remaining, only 12 portray signs of horizontal lines. The only décor type which is rarely seen in the Icelandic material is point circles and of all the combs studied, only one of the comb cases [45] features these. The rest of the combs show a general display either of diamond decoration, or ribbon ornamentation.

**Figure 17: First row; examples of low quality combs (top left; [26] x 2; top right; [4] and [25]). Second row; examples of good quality combs (bottom left; [20]; bottom right; [32]).**

The quality of the decoration is of equal importance as the type. As previously mentioned, Medieval Period combs decreased in decoration as it moved towards mass production (Ashby 2014:119). Therefore it is important to watch for faults in the decoration of the combs as it might give evidence for differences in the manufacturing process. The width and depth may also tell us if the comb was a subject of mass production, as wide and deep incised decoration is often the trademark of a high quality comb. Yet, to measure decoration is a subjective matter at best. Many of the combs are worn down, and the décor has become increasingly shallow. Certain traits can, however, be highlighted. Three combs display clear signs of faults or carelessness in the decoration (fig. 17). The comb case [4], the only one with both diamond and ribbon ornamentation, has uneven lines and either very shallowly incised decoration, or extreme wear damages. The comb [25] has uneven lines and poorly executed teeth marks, while the end plate has unfinished decoration. Interestingly, all three "low quality" combs were discovered at settlements. The decoration on the combs from the Icelandic graves, generally to be of better quality, although both comb [36] and [37] lack any kind of decoration.

**Figure 18: Photo of comb [24].**

One comb [24] can be described as having highly irregular decorations, consisting of parallel Y's spanning the connecting plate (fig. 18). The closest decorative equivalent is found on Sami spoons (Dunfjeld 2006:79) with what can be described as a triangular ornamentation. That this kind of decoration was attempted on this comb is not unlikely, as there are clear similarities in the bone

craftsmanship of these cultures, best illustrated by the shared dedication to ribbon ornamentation (Dunfjeld 2006:57-73). However, Sami objects hold points marked in-between the diagonal Y's, which is missing on comb [24]. Moreover, vertical lines stretching from the triangles are not represented in Sami tradition either. Consequently, these seem to more likely be constructional mishaps. Combs with interlacing diagonal lines, forming either ribbon ornamentation or diamonds in the middle part of the connecting plates, are fairly typical in the Viking Age (e.g. Ambrosiani 1981:64; MacGregor 1985:89; Smirnova 2005:57-76). It might seem like something similar was attempted with the comb in question. Comparable constructional faults have been identified on two combs from Novgorod (fig. 19) with Scandinavian affinity (Smirnova 2005:35). I find it likely that comb [24] should be understood as a poorly constructed type 6 comb, rather than a comb with irregular decoration.

**Figure 19: Combs from Novgorod portraying possible faults in the decoration (illustration from Smirnova 2005:37).**

## 6.3 Construction

Identifying the constructional elements of a comb is the primary way to identify it according to typology, thus being paramount to the discussion in chapter 7. Subtle indications as to how rivets are set, may pinpoint its origin, highlighting the importance of measuring every aspects of the comb. Consequently, I will point to four different steps in the manufacturing process of combs: the connecting plates; the rivets; the tooth plates; and the cut marks.

### 6.3.1 Connecting plates

Identification of combs is often partly done by the shape and size of the connecting plates, and quick distinctions can be drawn on its length, section and profile. The first feature people often comment in regards to combs is its length, and as such, this aspect will be analyzed first.

Petersen (1951:488) defines combs measuring over 15 cm in length as long combs, while

combs below 15 cm are termed to be of normal size or short. Ashby's (2011a) typology follows similar distinction. He emphasizes that type 6 combs are usually found to be between 10 and 15 cm in length, while type 5 and 7 combs are usually found to be around 18 cm in length. As I will organize the combs according to Ashby's typology, I will draw a line between combs at 15 cm (table 5). In cases where combs were too fragmented to be measured, their belonging comb cases have been measured instead as the comb's overall length cannot supersede the edges of the case.

Table 5 show 10 combs and cases measuring less than 15 cm. 6 combs are longer than 15 cm, although none exceed 17 cm. The only comb in the material above this length is [39]. This comb appears to have been even longer than 20 cm, considering that there is a piece missing. In releation to the gender discussion (table 3), there are four combs from female graves which can be identified as short types [30][36][37][38-2], while two [39][47] can be identified as long types. Among the combs from the male graves, there is one which can be identified as a short type [44], while two are long [29][40]. In the graves where the gender was unknown, one comb [31] is short, while three combs [41][43][46] are of unknown size, and one is double sided [35]. As such, there is a small difference in the ratios between combs and the genders of the deceased, with the male burials containing more long combs than short, while the opposite can be seen in the female burials. Nonetheless, there is too little evidence to support any conclusive results, especially considering that comb [36][37] and [38-2] were discovered in the same grave.

| **<15 cm** | **>15,1 cm** |
|---|---|
| 1, 4, 25, 30, (32, 33), 36, 37, 38-1, 38-2, 45 | 7, 10, 20, 39, 40, 47 |

**Table 5: Comb length. 32 and 33 are parts of the same case.**

The locations of where the combs were found provide some interesting information. Among the combs found in the Icelandic Viking Age graves, there is one in the southern and one in the western region which can be identified as long (I estimate it to have been just over 15 cm). Both combs complete enough to be measured in the northern region are of long types, as well as one [47] out of two in the eastern region. Two of the measurable combs [7][20] in the settlement material are also considered long. Thus the evidence seems to incline towards a preference for long combs in the eastern region. The western and southern regions' grave finds, on the other hand, portrays a preference for short combs, as no comb in the region give evidence of being longer than 15 cm. Yet, a study of the section and profile has to be

undertaken before aconclusion can be drawn.

Comb pieces where major parts are missing, can be measured and analyzed according to their connecting plate's profile and section. Combs with connecting plates which are identifiable in profile are listed in table 6, and combs with identifiable sections have been organized in table 7.

| Width | Straight profile | Plano convex profile | Convex profile |
|---|---|---|---|
| **<1 cm** | 25 | 16, 21-1, 26, (42) | 25 |
| **1,01 – 1,25 cm** | (13), 24 | 1, 10, (29), (44) | 21-2 |
| **>1,26 cm** | | 7, 20, 31, 39 | |
| **Unknown** | | 36, 47 | (37), 40 |
| **Total** | 3 | 14 | 4 |

**Table 6: Connecting plates categorized by their profile. Numbers in parentheses are probable in profile.**

Comparing table 5 and 6, one can see that all the combs measuring above 15 cm seem to hold plano convex profiles. Shorter comb types are more difficult to assess, as the majority of them consist of comb cases, making it impossible to discern any profile shapes. It is important to note that the majority of the combs are not as wide as what has come to be known of comb types typically found in Norway. Only 4 combs have connecting plates measuring over 1,26 cm in width, which makes the Icelandic combs considerably slimmer than their Norwegian counterparts. Moreover, the amount of convex and straight profiles is in stark contrast to similar material from the Norwegian Viking Age (Petersen 1951:485-490; Sjøvold 1974:237-244). Nevertheless, some of these connecting plates are not complete and does not provide correct measurements. Still, they arguably seem to be closer to Medieval Period combs than Viking Age combs especially considering that the visual estimates of two of the combs [36][37] on display at the Icelandic National Museum suggests that their profile seem to be rather narrow.

| Plano convex section | Shallow plano convex section | Other |
|---|---|---|
| (16), 21-2, 24, 25, 36 | 1, 7, 10, 20, 21-1, 26, 37, 42, 39, 47 | 31, 35 |

**Table 7: Connecting plates organized by their section.**

Most Norse Viking Age combs have either a shallow plano convex section, typical for type 5 combs, or a plano convex section with a considerable deeper cross section, illustrated in type 6 combs. Comparing these to the lengths of the Icelandic combs, these measurment fits well with some of the longest combs. Both comb [10] and [20] are approximately 3mm thick in section, compared to [25] which has a thicker connecting plate (4,5 mm). Still, it is too difficult to judge by this criteria alone, as comb [1] is defined as short, but still has a connecting plate that measures only 3 mm in thickness. Considering that the thickness of the combs' connecting plates generally range from 3 mm to 5 mm and that a major part of the short combs are also seemingly shallow plano convex in section, there seems to be a grey area between the two types filled with combs which may be identified as both type 5 and 6, or neither of them.

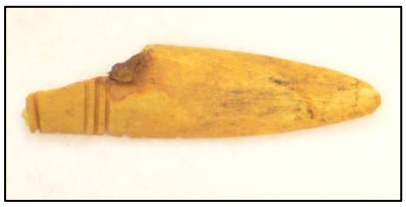

**Figure 20: Photo of comb [21-2].**

The profile of one of the combs [21-2] (fig. 20) from the Icelandic material sets itself apart from the others. The only remaining part of the comb is a piece of its connecting plate, with evidence of four vertical parallel lines. Its form can be considered elliptical, a shape that is not common of any of the types outlined by Ashby. It might seem like this is the result of a poorly executed construction, as was the case with the previous irregular piece. Furthermore, I consider it likely that it would have been understood as unfinished if it was found anywhere else, indicating that some form of comb production may at some point have taken place in Iceland. There is, however, little evidence in the rest of the Icelandic comb material to indicate that this has been the case, and as stated previously, there seems to be a common consensus that no manufacturing of combs took place in Iceland (Mehler 2007). The closest possible identification of the comb to a type, in Ashby's typology, would be the irregular type 7, as he states that this type has a wide variety of profile shapes. Nevertheless, this would entail it to have been longer than what appears. I consider it more likely that this comb, like the former, is a result of poor construction. This would agree with the previous notions regarding a higher frequency of low quality combs in the settlement material than in the grave material.

### 6.3.2 Rivets

Ashby (2009:16-17) has pointed towards differences in the techniques used in the riveting of

combs. Based on these varieties, he argues there is an industrial conservatism in type 1C and 12 based on local traditions, contrary to type 11, which displays a wide variety of techniques, suggesting a small group of artisans for this type (Ashby 2009:17). Although there are exceptions to these techniques, they can serve as a guide to identify certain constructional techniques, and where they might have originated.

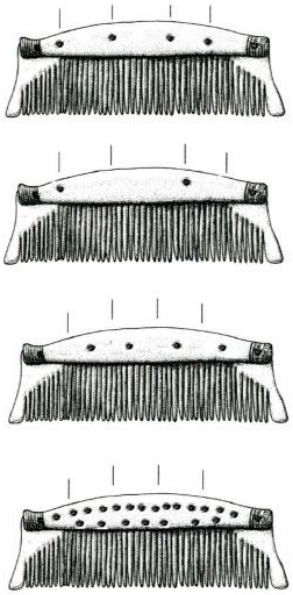

**Figure 21: Portrayal of different riveting techniques. From top to bottom: every edge, alternating edge, central and decorative. Copyright: Sven Schroeder / Steve Ashby.**

Five different techniques have been identified by Ashby (2009:16-18; 2014:58): rivets fastened at every tooth plate edge; rivets fastened at alternating tooth plate edges; rivets fastened at the central part of the tooth plate; rivets used as a decorative measure; and a mix between the types (fig. 21). A study of rivets among Norse combs has only been done on type 5 combs. According to Ashby (2009:16), these feature a wide variety of techniques, but mainly center around alternating edge or every edge techniques.

Table 8 divides the Icelandic comb material based on the riveting technique used. Combs labeled certain are complete or almost complete combs. These combs have clear patterns which distinguish them as portraying one specific technique. The difference between combs using a mix of techniques and combs using a decorative technique is difficult to assess, and is often susceptible to subjective estimations. The distinction used in this thesis is that the interval between each rivet in the decorative technique is of equal length or that the nail is made of copper. In contrast, combs using the mixed technique have variances in the interval of the rivets. Comb pieces in the doubtful section are tooth plates that either have rivet holes on one or both sides. Comb pieces without rivet holes, and end plates have not been excluded in this section.

| | Alternating edge | Every edge | Central | Mix | Decorative |
|---|---|---|---|---|---|
| **Certain** | 20, 37 | 10 | 1 | 7, 36, 47 | 31, 35, 39 |
| **Probably** | 13, 46 | | | 25 | |
| **Doubtful** | 6, 14, 18, 19, 22, 23, 27 | 42 | 44, 38-2 | 40 | |

**Table 8: Riveting practice displayed in comb remains found in Iceland.**

Based on table 8, one can see a clear preference for the alternating edge technique. Although a considerable amount of the pieces can be found in the doubtful section, one may still use these to separate the alternating edge, every edge and central techniques, as evidence of these cannot be found together on the same plate. Hence, one can see that the every edge and central techniques are rarely seen in Iceland.

The way in which rivets are incorporated into the design of the comb can be the deciding factor between a poor and good quality comb, as circumstances where riveting is used as an active player in decoration have been identified (e.g. Clarke and Heald 2002). Except the combs with copper rivets, detailed below, few of the combs seem to display any forethought in the way their rivets are set. Among the combs where some thought may have gone into the placement, we find comb [7], [10] and [47] where the rivets are set at equal distance across the connecting plate, although intrude on the decoration. Comb [20] has few rivets, and it seems likely that the comb maker has designed it so that as few rivets as possible would be needed: 5 rivets keeping 6 tooth plates fastened to the connecting plate. Smirnova (2005:30) mentions that this may have been done as a result of trying to minimize the weight of the comb and the damage during manufacture. Combs [36] and [37] have rivets which have been set with some symmetry in mind, but have no decor. Comb [39] has large amount of rivets (more than necessary), and is already understood as having decorative rivets, although it does intrude on other decorative aspects of the comb.

Another interesting aspect of their rivets is the average size and material. Copper rivets are often identified in combs from the medieval period, but less so in the Viking Age (Ashby 2009, 2011a; Petersen 1951:485; Sjøvold 1974:238; Wiberg 1977). As such, it is interesting to see a double sided composite comb [35] with copper rivets in the grave material. The comb seems to be of type 13, which, according to Ashby's typology, would date it to the mid-11$^{th}$. This contradicts previous notions about the age of the Icelandic Viking Age graves. Consequently, based on the available literature, I would argue that comb [35] should not be considered to be coming from a grave. As previously mentioned, the literature does not state in which grave it was found, only that it was found in the area of graves 7,8, and 9 in Hafurbjarnastaðir (Friðriksson 2000:561). Considering how these combs can be dated to in between the 12$^{th}$ and 15$^{th}$ century AD, it seems likely that it could have been accidently lost on the gravesite. Supporting this argument is the fact that no other artefacts were discovered in these three graves. Even though Christian people in Iceland were allowed, to some degree,

to keep some of their pagan ways, I see it unlikely that a person could have been buried in a pagan grave in a previously used grave site, in the 12th century. As this comb cannot be considered a Viking Age comb, it will not be discussed any further.

Another comb portraying evidence for copper usage is [31]. This comb has had copper sheeting on the tooth plates, which could be glimpsed through oval shaped openings in the connecting plates of the comb. This is considered a trademark for type 9 combs, starting to appear in the late 10th century and commonly seen in 11th century contexts. This would identify it as one of the earliest examples of its type in Europe, considering it was discovered in a pagan grave. This would give it an approximately date of late 10th century, based on the Iceland's conversion to Christianity (see chapter 5).

The rivets from the remaining combs all measure between 2 and 4 mm and are made from iron, indicating no unusual patterns

### 6.3.3 Tooth plates

Tooth plates are well suited for discussion on quality, as the manner of how the teeth are cut can give insight to the craftsman's tools and skill. The form of the upper edge of the tooth plate may also tell whether if the comb was plano convex or not. Among the ten isolated tooth plates of this study, seven had either a diagonal upper edge, or a curved edge. This means that 9 extra combs with plano convex profile may be present in the material, if the tooth plates does indeed belong to 9 different combs.

| Teeth width | >1,5mm | 1,0 – 1,49mm | 0,5 – 0,99mm | <0,49mm |
|---|---|---|---|---|
| **Comb** | 2, 23 | 6, 7, 11, 13, 14, 18, 20, 25, 26, 27, 28, 39, 46 | 1, 5, 10, 16, 19, 22, 31, 40, 42, 44 | 17 |
| **Total** | 2 | 13 | 10 | 1 |

**Table 9: Tooth plates on the combs categorized by their width.**

Concerning the quality of the tooth plates, it should be possible to differentiate between poorly and properly cut teeth, as these could have been cut to different widths. Six combs [7][13][14][18][25][40] portray signs of uneven teeth, five of which have been found at settlements, again illustrating the seemingly lower quality of the combs from the settlement

material. In general, the width of the Icelandic combs' teeth seem to be of average size, most of them ranging between 0,5 and 1,49 mm (table 9).

### 6.3.4 Cut marks

The appearance of cut marks on the connecting plates of combs is often discussed, and some archaeologists have argued that they may have served a decorative purpose (e.g. MacGregor 1985:75). These marks appear as a result of cutting the teeth, for example with a saw or file, and are, in some cases, lined perfectly, indicating an ornamental tradition. This is difficult to prove, but certainly one can see a difference in how the cutting of teeth was done, and its effect on a comb's quality. The best example can be found in combs [20] and [25]. The former has cut marks of equal width, although of different length, but never deeper into the connecting plate than the horizontal line covering the edge of the plate. The latter, hold cutmarks of variable width, and with larger variations of length. Occasionally these do not leave marks on the connecting plates, while they at other times cut deeper than the horizontal line at the edge of the connecting plate. Consequently, one may draw the conclusion that there is a difference in the quality of the tools used and the skill of the combmaker, the former being of a much higher quality. It is, however, difficult to assess the entirety of the material based on these criteria, as some of the combs have been subject to erosion, or are too. One can, on the other hand, measure the average width between their teeth. Hoftun (1993:13) made an attempt at such an approach, dividing his material into three different groups in order to see whether he could match them to tools belonging to the same period. He sorted the teeth into fine, medium or coarse. A tool based approach is difficult in Iceland due to the lack of identified tools from graves, and this study will instead focus on the width between the teeth (table 10). These results demonstrate that no coarse combs have been found in Iceland, as all the combs are under the 1 mm limit. Consequently, the so called horse combs, typical of the Norwegian Viking Age (Petersen 1951:488-489), cannot be found in Iceland.

| <0,6mm | 0,6-1mm | >1,1mm |
|---|---|---|
| 1, 2, 7, 11, 13, 14, 16, 19, 20, 22, 26, 27, 39 | 6, 8, 10, 17, 18, 23, 25, 28, 31, 42, 44, 46 | |

**Table 10: The combs divided into groups based on the gap between the teeth.**

## 6.4 Comb cases

Composite combs have frequently been found with comb cases. Although often made from antler or bone, cases could also be made from other organic materials, such as leather or wood (MacGregor 1985:96). The cases would also often be decorated similarly to the combs they were protecting (MacGregor 1985:96). In Iceland, two different types of cases appear in the material. The first is the wider piece featuring two connecting plates held together by two end plates (e.g. [4]). The second feature four connecting plates, two on each side, which, as the former, is also held together by two end plates (e.g. [32]). Both appear in medieval period material from Oslo (Grieg 1933:226; Wiberg 1977:207), Bergen (Grieg 1933:227) and Trondheim (Flodin 1989:141). Similar cases are known throughout the Viking Age in northern Europe (MacGregor 1985:96-98), although rarely show up in Viking Age Norway (Petersen 1951:488; Sjøvold 1974:241). The former case type become rarer in time, while the latter more common (MacGregor 1985:98). In general, comb cases seem more popular in Viking Age Iceland than in Viking Age Norway, which may be underlined by the amount of combs with holes in their endplate. These holes might have been used to fasten the comb in a belt or hanging the comb around the neck (Ashby 2014:108), but I consider it more likely they would have been used to keep the comb from getting unattached from the case. As a consequence, 6 of the comb pieces [1][7][8][11][25][36] could have had matching cases, supposing that combs [31], [37], [38-2] and [44] belonged to the matching cases from the graves they were discovered in (fig. 22). According to the figure, 21% of the Icelandic combs may have had cases. In addition we find the two comb cases from Hofstaðir. These have not been included in the percentage calculation, as one cannot exclude that they might have belonged to one of the combs already counted. This results is in stark contrast to Norway were only three cases have been found in the Viking Age grave material, entailing that only 2,5% of the Norwegian Late Iron Age combs had cases (Sjøvold 1974:237, 241).

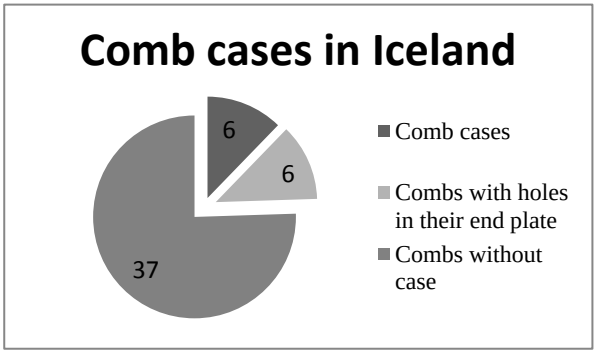


**Figure 22: Possible amount of cases in the Icelandic material.**

## 6.5 Putting the pieces back together

The results of the technological study give information for the organization of the Icelandic

combs according to Ashby's typology, and we may glimpse some basic data from the results. The length, section and profile of the combs, all point to a slight overweight of type 5 combs in the Icelandic material, which may indicate a Norwegian connection (table 11). Although this comb is typical in most North European regions, the type gradually phased out during the 10th century, remaining common only in Norway. Nevertheless, there are some problems regarding the technological study. These have been illuminated throughout the analysis, and illustrate how the measurements and context of the combs may point to one type, while previous research on combs may point to another. As stated in the chapter 3, in-depth knowledge of comb material on a general basis is needed to utilize a typology. A look at comparable material is thus needed before any proper classification can be established.

| | Type 5 | Type 6 | Type 7 | Type 9 | Type 13 |
|---|---|---|---|---|---|
| Certain | 7, 20, 39, 47 | 1, 25, 36 | | 31 | 35 |
| Possible | 15, 21-1, 26, 29, 40, 42 | 10, 16, 24, 30, 37 | | | |
| **Total** | 10 | 8 | | 1 | 1 |

**Table 11: The Icelandic combs preliminary divided according to Ashby's typology by using the results from the technological study.**

### 6.5.1 Comparing combs

As stated in chapter 3 and 4, finding parallels to the Icelandic material is an important aspect of the study. When the results from a technological study disagree with the technological information provided in a typology, finding comparisons could point to the correct identification of the artefact. This can best be illustrated by the division between type 5 and 6 combs, as the identification of a shallow plano convex or plano convex section is often subjective, creating a grey area filled with combs belonging seemingly to neither. Moreover, Ashby (2011a) notes the general length of type 5 combs to be approximately 18 cm, while type 6 combs can usually be found in the range of 10-15 cm. This is problematic considering the two combs appearing in between these generalized lengths. As such, I will provide parallels to some of the more ambiguous combs. A table with results from both the technological and the comparative study can be found at the end of the chapter.

Five combs in the Icelandic material can be considered to be especially ambiguous and will require a thorough comparative study. Comb [7] and [20] should, on basis of the

technological study, be termed type 5 combs. The length of both combs surpass 15 cm, though while comb [20]'s form is comparable to type 5 combs found at for instance Birka and Ribe (e.g. Ambrosiani 1981:67), the shape of comb [7] has more in common with type 6 combs (e.g. Ambrosiani 1981:64; Smirnova 2005:89). Moreover, comb nr [7] has seemingly featured a comb case, which is untypical for the larger type 5 combs. The comparative study would thus classify this particular comb as a type 6.

Among the shorter combs, [37] seems to have more in common with Medieval Period comb types outlined in Wiberg's (see 1977:205 fig. 10) typology. This is because the profile, which can be loosely defined as convex-convex, is in contrast to the generalization of type 6 combs as plano convex. This could be due to the fact that it seems to be broken mid-through. Furthermore, it is unusual to find comb cases that fit a convex-convex shape, which might indicate that it was originally plano convex. The distinction between a shallow plano convex section and a plano convex section is at the center of attention again, as both [7] and [37] are shallow plano convex though neither can be classified as type 5. As such they illustrate the wide variety of combs included in type 6 and the ambiguity of classifying combs based on their section.

The last combs I want to highlight are [10] and [39]. The latter is the longest comb in the Icelandic material, measuring 18 cm in length. The profile of the comb is questionable, as its connecting plate is irregular and convex concave, which could identify it as a type 7 comb. Nonetheless, as with [37], the comb is broken giving the illusion of a somewhat different shape. By comparison, it has more in common with type 5 combs (e.g. MacGregor 1985:84 fig. 50-b) than type 7 combs (e.g. Dunlevy 1988:413 fig. 7-1/2). Comb [10] provides difficulties as its young date confirms it as a comb of Medieval Period context. This would exclude it from type 5 and 6, and in general from Ashby's typology all together. It could be of Wibergs type E1 or E2 (e.g. Wiberg 1977:205 fig. 8; Wiberg 1987:415 fig. 2), which would seem likely given that these types can be described as a continuation of type 5 and 6, becoming more standardised and lacking of the decoration attributed to the latter. Considering how Ashby's typology is based on material found in the British Isles one should not exclude this possibility.

The examples presented above together with the results of the technological study can be seen in table 11. Interestingly, the table illustrates how the comparative study markedly

| | Type 5 | Type 6 | Type 7 | Type 9 | Type 13 |
|---|---|---|---|---|---|
| Certain | 20, 39, 47 | 1, 7, 25, 36, 37 | | 31 | 35 |
| Possible | 29, 40 | 16, 24, 30, 44 | | | |
| **Total** | 5 | 9 | | 1 | 1 |

**Table 12: Table consisting of combs from Iceland sorted into Ashby's typology through the use of technological and comparative studies.**

changes the distribution among the combs from type 5 to type 6. This demonstrates the importance of combining methods to get a complete picture of the material in question. Moreover, combs which were termed possible type 5 or 6 on the basis of the connecting plate's section in table 11, have been removed in table 12, as the examples above have disproved the possibility of identifying combs merely based on section or profile.

On grounds of table 12, it is possible to date the combs with a higher precision. Based on the data made available by Ashby (2009, 2011a), Smirnova (2005) and Ambrosiani (1981), I argue that the type 5 combs in the Icelandic material should be dated to between 871±2 and 950 AD, while the type 6 combs can in general be dated to the 10th century (table 13).

| **Timeline** | | | | | |
|---|---|---|---|---|---|
| **Viking Age:** 12, *34, 40, 41, 42, 43, (44, 45), 46* | | | | **Medieval Period:** *35* | |
| **Tephra layer 871±2 –V-SV 950:** 20, 21-1, 21-2, 22, 23, 24, 25, 26, 27, *29, 39, 40, 47* | | | | **Tephra layer V-SV950 – 1158:** | |
| | **900-1000:** *30, (36, 37, 38-1, 38-2), 44* | | | | |
| | **900-950:** 16 | **940-980:** 1, 3, 4, 5, 7* | **980-1030:** *(31, 32, 33)* | **1030-1070:** 6, 8, 9 | |
| | | | | **1050:** 10, 11, 13, 14, 15, 17 | **1050-1100:** 18 |

**Table 13: Updated table of all the combs divided into sections based on their age. The dates are drawn from the authors' own interpretations of the data available. Comb 2, 19 and 28 are of unknown date. Combs from graves are written in italic. Combs in parentheses were found in the same grave.**

# 7. Tracing Paths

In this thesis, I have so far highlighted aspects of the Icelandic Viking Age comb material in an attempt to identify the cultural affinity of the Icelandic people in the Viking Age. In consideration of these arguments, I provided a twofold point of focus at the beginning of this thesis: *Where were the Icelandic combs constructed* and *what can the combs tell us about the cultural affinity of the Icelandic settlers?* The purpose of this focus was to explore the possibilities that exist in the Icelandic archaeological artefact material. The groundwork has been provided through a technological and comparative approach with an emphasis on a step by step analysis of the combs. The theoretical side has served as a framework to work within, and has highlighted the possibilities in the context of the Icelandic combs. The variety in the Icelandic comb material has, based on the analysis, provided the possibility of tracing each comb's path back to its cultural origin. However, the way in which I intend to interpret the results, demands a thorough discussion.

This chapter will consist of three parts. The first will cover why and how the combs arrived in Iceland. The second will explore the possible production sites of the Icelandic combs, while the third will utilize the results of the first and second part in the following discussion regarding the cultural affinity the combs may have provided for the Icelandic people in the Viking Age. Concluding remarks will follow in chapter 8. However, before I begin tracing the paths of the combs, I need to elaborate on one of the primary arguments serving as groundwork for this thesis.

I pointed at some concerns regarding the Norwegian Viking Age comb material in chapter 2, and especially the lack of comb material from AD 950-1000 is problematic. This could be attributed to a decrease in pagan burials in Norway during the 10$^{th}$ century, although this decrease varied significantly between the Norwegian counties (Engelstand 1927, 1929; Larsen 1976, 1984; Solberg 2003:314-315). Ashby (2014:61) states that "one of the fundamental tenets of archaeological interpretations is that absence of evidence does not equal evidence of absence", as he argues for an alternative to the itinerant comb making model in the British Isles. Following a similar line of thought, type 6 combs may have been more common in the Norwegian Viking Age than previously assumed. Furthermore, it is likely that comb production existed in Kaupang on the same scale as it did in Birka, Ribe,

Hedeby and Dorestad. Nonetheless, to argue on the basis of a lack of evidence is difficult, but it should be emphasised that the results of this study are influenced by the lack of type 6 combs in the Norwegian Viking Age material, and that it is possible that this type did exist at Kaupang and in Viking Age contexts from 950 – 1000 AD.

## 7.1 The value of the comb

Before I can begin discussing the possible origins of each of the comb types found in Iceland, the value the comb may have had for the Icelandic people, must be discussed. This is imperative to how we understand the appearance of certain comb types over other. I previously mentioned how unburnt combs appear in cremation burials in Norway, and how Iceland is distinct from Norway with regards to the lack of this tradition. It is therefore difficult to argue that the comb had a similar ideological value in Iceland as in Norway. Nevertheless, the fact that combs appear in Icelandic graves proves that they were in some way significant to the Icelandic society. This is suggested by the higher quality of the Icelandic combs discovered in graves compared to those from settlements. Moreover, Ashby (2014:106) states that combs cannot have been disposable items, considering the time it took to produce a comb, the often limited amount of materials and the fact that some combs seem to have been repaired. The lack of comb production in Iceland could also have affected their value, increasing its worth to the Icelanders, much as it did for communities in late Norse Orkney (Ashby 2014:111).

The value of the comb would, however, decrease towards the end of the Viking Age due to mass production. Some combs may still have retained their cultural value, but the majority would have become day to day items (Ashby 2014:110). This may explain why 13 combs in the Icelandic material were found in ash dumps or middens. Their ideological, cultural and economic value may have decreased to the point where the Icelanders would rather discard a semi broken comb, than keep it for its inherent cultural value. I would also question how some of the complete combs from the settlements have seemingly been forgotten or lost. A comb would surely be too big to loose through gaps in the floor of a house without noticing it. Could there be another possibility? If we consider the written sources, Svarfdæla saga tell us the story of Torstein who broke his comb and threw the pieces to the ground, thus claiming ownership of his land (Hoftun 1993:63). To my knowledge, this is the only mentioning of a comb ever found in the Icelandic sagas. All other quotes contain references to hair which has

a tendency to be interpreted as indicating the importance of combs (e.g. Eggen 2007; Gansum 2003; Hoftun 1993; Töpfer 2010). However, to ascertain that a comb has been used in such a way is near impossible and looking at their context, none of the discarded complete combs seems to have served this purpose. I find it more likely that the combs were broken beyond repair and left on purpose, especially considering how all the combs from the settlements looks to have been broken prior to being dumped. As such, it seems like the Icelandic combs in general demonstrate the change in value seen in other North European regions during the 10th century.

## 7.2 Trade, gift-exchange and migration

As I have outlined the value the comb may have had for the Icelandic people, we can now discuss how they actually came to be in Iceland. This is important as it might give us clues to why these specific combs where chosen in the first place. Consequently, I will present three different possibilities in which the combs might have arrived in Iceland: migration, gift exchange and trade. Comb production will not be mentioned in this regard, as the analysis (see 6.3.1) and previous research (e.g. Mehler 2007:233-234) disproves the possibilities of any permanent or visiting comb maker.

### 7.2.1 Migration

Migration may seem like the obvious explanation for why combs are found in Iceland in the first place. The first Icelandic settlers would have brought their personal belongings with them and it is natural to assume that some combs would have been brought along. For obvious reasons, however, it is difficult to ascertain which combs this applies to. It is therefore interesting to note Douglas Price and Hildur Gestsdóttir's (2006) study on the skeletal remains from pagan graves in Iceland. Through isotopic analysis of the remains of 46 individuals from 36 different locations, they demonstrated that 13 individuals had different strontium isotope ratios from what is considered normal in Iceland. Consequently, these 13 individuals were identified as being first generation settlers, although the lack of similar studies in other countries makes it difficult to determine a place of origin for them (Price and Gestsdóttir 2006:136).

Of the 36 locations studied by Price and Gestsdóttir, 4 had remains of combs

**(**[30][31][32][33][34]**) (**[36][37][38-1][38-2]**) (**[44][45]**)** [47]; one which was identified to belong to a first generation settler [47]. This particular comb is one out of three combs in the Icelandic material which I have identified as a certain type 5, and its size, section and profile is practically identical to those typically found in Norway. However, the riveting technique used on the comb is divergent from what is generally seen on combs from eastern and middle Norway (Ashby 2009:16; Eggen 2007:28), although without a proper examination of riveting practice in Viking Age Norway it is difficult to exclude the country as the origin of this particular comb. Interestingly, none of the combs from the three other locations have been identified as type 5. This supports the chronology outlined in section 6.5.1, seeing that some of the combs from the three remaining graves have been identified as type 6 or 9. These two types are considered to be younger than type 5, hence it is more likely that these would appear in the hands of a second or third generation settler.

### 7.2.2 Gift exchange

If combs were not brought over with the initial migration, they were most likely either traded or were a result of some form of gift exchange. The latter is a particular problematic aspect as it implies that the acquisition of some of the Icelandic combs would not have been subject to choice, and as a result, may portray an unrelated cultural affinity. As such, it is important to note that when speaking of gift exchange, it is either with reference to internal or external exchange. While external gift-exchange should be considered an aristocratic or elitist practice (e.g. Callmer 1995) transpiring across the North Atlantic, the internal is defined as an exchange between chieftains and their subjects. Such practice was important for the chieftains, as it was a way for them to maintain an advantageous amount of supporters. The acceptance of a gift would create an inherent obligation to reciprocate (Hedeager 1994:132; Mauss 1990; Sheehan 2013; Sigurðsson 1999:91) which could prove to be important at the regional and national tings. Such practice in Iceland has often been put down to the concept of transferring property, distribution of food, or feasting (Byock 2001:67; Dietler 1996:90; Sigurðsson 1999:91-93; 2008:23-24; Zori, et al. 2013:152), although artefacts were often utilized in similar practice as well (Sigurðsson 1999:92). Considering the discussion of the value of the comb, it may very well have been used in Icelandic gift-exchange as a means to elevate a subordinate's social status. However, it is not internal gift exchange which is important to discuss here, as the comb would already have arrived in Iceland through either migration or trade, giving it an inherent cultural affinity to the Icelandic people. It is the

nature of external gift exchange which needs to be discussed.

External gift exchange would most likely have been carried out between chieftains in Iceland and their counterparts across the North Atlantic. Such practice could in theory diminish the importance of the combs' cultural affinity, as the acceptance of a gift would not have been down to choice but rather a result of political affairs. However, I do not believe that external gift-exchange with combs played a major part in Iceland, as the majority of the Icelandic comb material do not meet the basic requirements for such practice. Combs included in gift-exchange would have been high quality combs with exceptional executed decoration (Callmer 1995), and the analysis demonstrate that these are seldom seen in the Icelandic material. Furthermore, Ashby (2014:120) states that towards the late 10$^{th}$ century, combs eventually fell out of use in gift exchange, which coincides with the colonization of Iceland. This would exclude the combs discovered at Icelandic settlements, as not only should the quality on these be considered average at best (see section 5.2), but the majority of the combs can be dated to the 10$^{th}$ century (see table 13). Combs found in graves, however, are of significantly better quality. Although the material is fragmented, three combs [31][44][47] feature aspects which imply they are of high quality thus making them eligible for elite gift-exchange. Comb [47] has previously been discussed and, considering its quality and possible 9$^{th}$ century date, is a prime candidate for gift-exchange. The two other combs feature comb cases which, combined with being exceptionally decorated, would have doubled the amount of workload for the comb maker suggesting a greatly increased value (Ashby 2014:120). However, considering the small amount of combs which could have been used for gift exchange, and the preference for the 10$^{th}$ century type 6 in Iceland during the Viking Age, I consider it unlikely that this would have had implication for the cultural side of choosing combs.

### 7.2.3 Trade

The two preceding sections both point to trade as the primary way in which combs ended up in Iceland. Considering this, Einarsson (1994) arguments regarding Icelandic trade in artefacts needs to be discussed. As mentioned in the introduction, he argued that artefacts could not be utilized as groundwork for discussing any cultural heritage in Iceland, as he considered the trading options available to the Icelanders to give them no control of the general flow of artefacts into Iceland (Einarsson 1994:17). Although I consider his arguments

to be sound, I do not believe such a notion would affect the Icelandic comb material for reasons which will be outlined. The first thing to consider is that there is little evidence of foreigners traveling to Iceland for the purpose of trade (Magerøy 1993). Furthermore, to my knowledge, there is little indication of a transatlantic trade in the Viking Age, and the first early firm archaeological evidence of such trade is the appearance of Norwegian whetstone in Icelandic 11$^{th}$ century contexts (Hansen 2011). Therefore I consider it more likely that trade happened on a small scale, by Icelanders who were travelling, raiding, or visiting other North European regions. This is important considering how sixteen different comb types existed in northern Europe during the settling of Iceland. That only four of these have been discovered in Iceland implies that combs have been chosen based on the cultural and technological tradition the Icelandic people would have been most accustomed to. Thus the selection of combs by the Icelanders must have been subject to choice, and not influenced by foreign traders' culture. I have previously mentioned Ashby's (2009) suggestion about a Norse comb making tradition occurring side by side a Pictish tradition in Viking Age Scotland. As Pictish combs are not found in Viking Age graves from Scotland, he emphasized that the Vikings may have purposefully kept to their own tradition. The fact that the comb types found in Iceland are quite common across the North European regions in the Viking Age, underlines the importance of cultural tradition when they were choosing which comb to buy. This argument is key to understanding the cultural affinity of the Icelanders, and the subject of trade will thus be a recurring subject in the discussions below.

## 7.3 Where were the Icelandic combs constructed?

Following the results of the analysis, I argue that the 16 combs organized in table 12 can be used to identify or exclude places of origin. I will begin this discussion with what I argue to be the youngest comb. I will then work my way through type 6 and 5 combs before detailing the possible places of origin of comb cases and demonstrating how fragments may provide supporting arguments for the rest of the material.

### 7.3.1 Type 9

The conversion to Christianity in Iceland gives archaeologists a unique chance to identify Icelandic pagan graves, although it brings some concerns as well. As previously stated, the conversion is said to have taken place in the year 1000 AD, and archaeologist have often used

this date to determine the age of Icelandic pagan graves (e.g. Eldjárn 1953, 1956). Although the Icelandic sagas have often proven themselves to be fairly accurate, it is difficult to believe that the Icelandic society simply one day decided to become Christian. This is problematic as I earlier emphasised the Icelandic combs' clear parallels to Medieval Period comb types. The single type 9 comb [31] in the Icelandic grave material, illustrates this point. The conversion to Christianity would imply that this was one of the earliest examples of its type in northern Europe, as it rarely appears in contexts earlier than the 11th century. Furthermore, this would, to my knowledge, be the first comb of its type to appear in a pagan grave. As it is considered a rare find in the 10th century, one may question how it ended up in an Icelandic pagan grave prior to the 11th century. In this sense, the comb material often suggests a medieval date and we are left in the awkward position of either believing the sagas or the combs.

If we consider the written sources first; these tell us that Iceland became Christianized as a result of continuous pressure from the Norwegian King, Olav Tryggvason. The tipping point occurred when he declared a trade embargo on the Icelandic population, and the Icelanders who at the time resided in Norwegian coastal towns, were taken hostage. Among these were sons of influential Icelandic chieftains, which Olav stated would be held captive until Iceland fully committed to the Christian faith. As a result, the Icelandic people held a vote at Þingvöllur and decided on converting to Christianity in 1000 AD (Byock 2001:297-301; Vésteinsson 2000:17).

An archaeological approach tell a slightly different story and Vésteinsson (2000:45-49) argues for the possibility of a transitional stage in Iceland in the 11th century. In the Viking World, the diverse amount of graves discovered has often been put down to either diffusion of traditions or as a way to express resistance towards a new religion (e.g. Nilsson 1996; Solli 1995). A different theory suggests that one should be careful with labeling Viking Age societies either Christian or pagan. The transition to a Christian society was rather a lengthy process which may have begun long before the Viking Age even started (Abrams 2000; Andrén 2005; Gräslund 2000, 2001). Furthermore, while the society may have been in a transitional stage, the people living in the society made intentional choices according to their own tradition and belief (Abrams 2000:143-145). Thus, the appearance of small amounts of grave goods in 11th century graves may be considered meaningful ways of treating the deceased, by people who considered themselves Christians or heathen (Lund 2013:56). Utilizing the same model on the Icelandic grave material would open up new possibilities,

and the single type 9 comb may then have had a later date of the 11th century.

Considering this discussion, I think it is highly plausible that some of the Icelandic combs discovered in graves, could have a later date. Particularly [36] and [37] seem to fit the description of early Medieval Period combs, and although these have been identified as type 6, further discussion may be needed. In consideration of comb [31], a place of origin is difficult to assess, although considering the other types which are yet to be discussed, it is not unlikely that it was constructed in Scotland. Nevertheless, I cannot exclude Norway either, and future in-depth studies of potential sub-types are needed before any conclusion can be reached.

### 7.3.2 Type 6

In chapter 3 I outlined problems regarding the use of typology, and these problems were demonstrated in the comparative analysis in chapter 6. Especially the ambiguity of type 6 combs was important, as this type tends to appear in several different shapes. Nevertheless, I identified nine combs in the Icelandic material as either possible or certain type 6 combs. This is significant as type 6 is considered to be practically non-existent in Norway. It can, however, be found at the majority of the marketplaces and graves in the Viking World outside of Norway, making it difficult to establish a certain area of origin. Hence we need to look elsewhere for information, and re-examining how the combs arrived in Iceland is a natural starting point.

In section 7.2.3, I argued that trade was the primary way in which combs arrived in Iceland. This trade has previously been considered to have occurred between Iceland and Norway (Marcus 1957), although there is little evidence in the sagas of Norwegians traveling to Iceland in the settlement period just for the sake of trade (Magerøy 1993). It is more likely that it was the Icelanders themselves who did the trading while they still had ships (Magerøy 1993:215). Furthermore, due to the lack of type 6 combs in Norway, we can exclude the direct trading route between Iceland and Norway and look elsewhere instead. Indeed it seems feasible to exclude the entirety of the Eastern Viking World, as it seems unlikely the Icelanders would journey past Denmark and into the Baltic Sea without stopping at, for instance, Bergen or Kaupang. Thus it seems more likely that the Icelanders would have traveled past the Faroe Islands, the Orkney Islands and either to the west or east of Scotland,

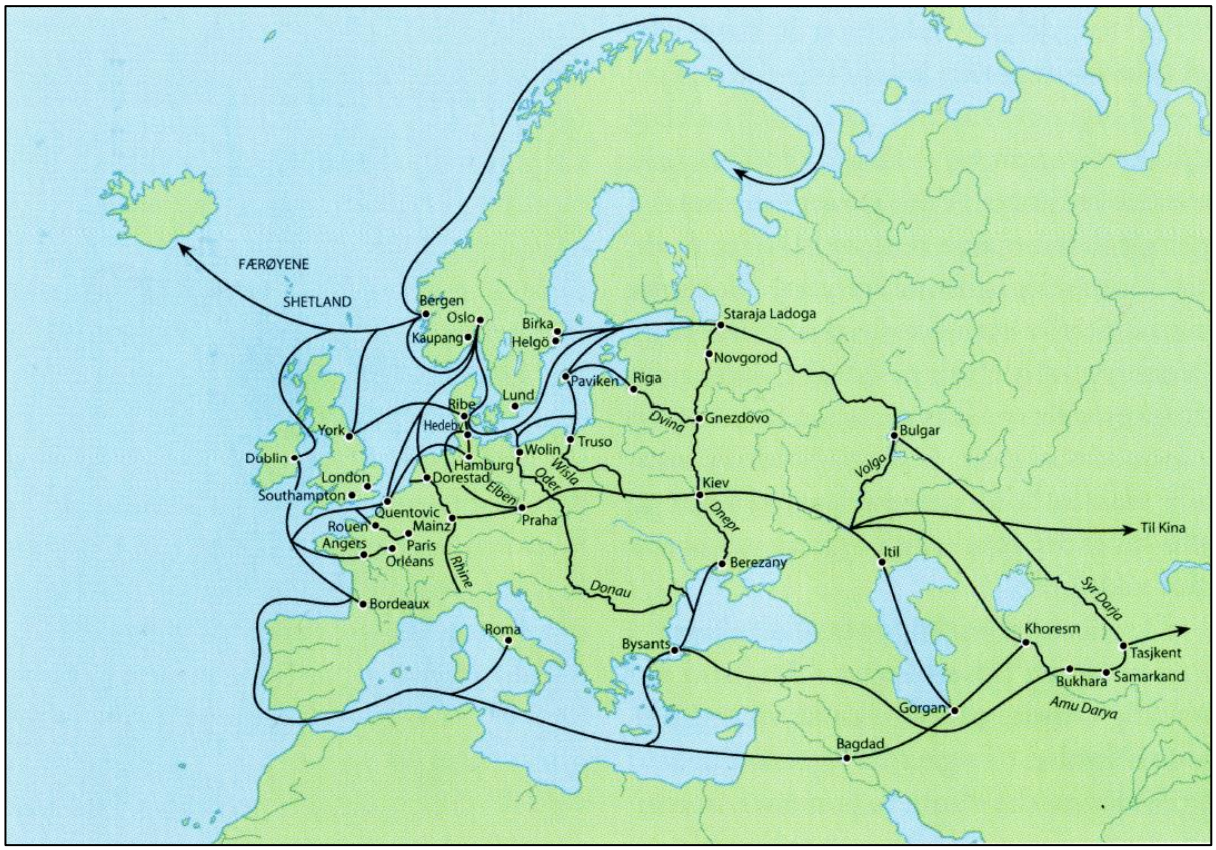


**Figure 23: Map of Norse trading routes during the Viking Age (illustration from Sigurðsson 2008:39).**

ending up near Dublin or York, and eventually Dorestad, Hedeby or Ribe (fig. 23).

The western route towards Dublin is of particular interest, due to the distribution of polyhedral bronze ringed pins, which are distributed across the western part of the Viking World, from Ireland to Iceland (Friðriksson 2000:603-604; Hansen 2003:48), indicating a cultural affinity in the western Viking World. Both type 6 and 5 have been found in Ireland and considering that Dublin is thought to be the largest and most important trading and population centre within Ireland in the 10$^{th}$ century (Mytum 2003:127), it seem likely that Dublin may have been the place of origin for some of the Icelandic type 6 combs. Furthermore, the ambiguity of the type 6 combs may illustrate a lack of proper instructions regarding its construction indicating a non-Scandinavian point of origin (e.g. Ashby 2011b:308).

### 7.3.3 Type 5

I have identified five combs as possible or certain type 5 combs. This type is usually never found later than 950 AD in northern Europe, although it is thought to remain common in

Norway until the Medieval Period. This also seems to be the case in the Orkneys as they have been found in layers dated to between 850 and 1000 AD at Skaill (Buteux 1997; Porter 1997:111, 134). Contrary to type 6, type 5 combs can be found all over the Viking World, but in different chronological contexts (see Ambrosiani 1981:27). We therefore do not have the option of looking at trade patterns to locate a possible place of origin. The result from the analysis of the riveting techniques used on the Icelandic combs, however, provides some interesting suggestions.

The majority of the Viking Age combs in Iceland feature an alternating edge riveting technique, commonly found in England, Southern Scandinavia and Northern Scotland (excluding the Orkneys). Apart from these regions, Ashby (2009:16) notes that this technique is most often seen in type 5 combs in Hedeby. In eastern Norway, the common practice is to place the rivets at the center of each tooth plate. Eggen (2007:28) mentions that of the 42 combs where placement of rivets could be identified, 21 used this technique. However, her typology does not seem to differentiate between the medieval type 9 combs and type 5 combs, making it difficult to obtain the exact number for one type. This may not necessary mean much as I consider riveting practice to be socially imbedded in a region's comb craftsmanship. As such, the practice is not as much down to choice as it is a consequence of a habit and/or tradition i.e. the comb maker is structured by what he is taught and used to (e.g. Ashby 2011b:312; Bourdieu 1977). Consequently, the use of a specific riveting technique could in theory reveal the origins of the crafter.

Although the majority of the combs in Iceland feature an alternating edge technique, there is not enough evidence in the certain type 5 and 6 combs to provide a definite origin for these specific types. Still, as the typical fashion of riveting in middle and eastern Norway is considered to be every edge or central, it certainly seems to underline the increasingly convincing notion that the Icelandic Viking Age comb material did not originate in Norway. To argue the origin further on the basis of riveting technique is, however, difficult as there have unfortunately not been done any similar studies aside from the areas mentioned. One therefore needs to look at cultural similarities to argue the question of origins any further.

### 7.3.4 Comb cases

Nine combs in the Icelandic material were determined to have had relating comb cases. As

previously stated, comb cases appear to be fairly common in the Viking World, but remain unusual in the Norwegian Viking Age (Sjøvold 1974:240-241). The amount of comb cases found in Iceland is therefore not entirely surprising. However, the general context of the Icelandic comb cases is in stark contrast to proposed theories regarding the use of such cases in northern Europe. Especially Ambrosiani's (1981:26-27) suggestion regarding comb cases found in graves in Birka, has received attention. She argued that cases were particularly associated with the male gender, as the majority of the cases discovered were found in male graves. Smirnova (2005:91) adopted this theory, stating that cases would be particularly useful to men considering their potentially hazardous life-style. Furthermore she pointed to similarities with cases found in male graves from Timerevo, Russia and Shestovitsy, Ukraine, underlining the proposition that cases were indeed male items.

In Iceland, however, only one comb case [45] can be said to have belonged to an individual of the male gender and one case [32][33] belonged to a grave were the gender has not been determined. Considering the female grave material, three combs featuring cases [36][37][38-2] have been found, but all of these belong to the same grave. Regarding the settlement material, combs featuring extra holes in their endplates have been discovered in pit houses. As previously stated in section 6.4, I consider combs with an extra hole in their end plates to have featured comb cases. Moreover, I also stated that combs found in pit houses should be considered female artefacts. Seeing that three combs [1][11][25] with evidence of comb cases have been found in Icelandic pit houses, the Icelandic comb case material do not follow the same pattern as its counterpart in eastern Scandinavia. Finding comparisons to the western Viking world is unfortunately difficult as apart from Grieg's (1940) work on graves from Scotland, no complete record of comb cases from the Viking Age in the North Atlantic colonies and Scotland has been written. Moreover, the possibilities of leather pouches being utilized as a sheath for combs is notable, as is the theory that many type 5 combs would most likely have been too large for an effective use of a cases (Ashby 2014:118). A parallel to the western parts of the western Viking World is therefore difficult to ascertain.

### 7.3.5 The fragments – supporting arguments

Although they might not give as much information as the complete/incomplete combs, the fragments can provide additional information which might shift the balance of the arguments regarding the cultural, social and technological aspects of the Icelandic combs. What I have

termed fragments are pieces which could not be typologically identified. Apart from the general context of these fragments, three different aspects have provided important information. The three aspects in question include the previously discussed arguments regarding riveting practice, the general shape of the piece, and the width of the comb's teeth.

Following my previous discussion regarding the riveting practice in Iceland, the identification of riveting techniques on fragments is paramount to support the arguments previously presented. As stated, the alternating edge is the technique most commonly seen in Iceland. This is attributed by the tooth plate fragments, and the study of these has proven that nine pieces were considered to have either a doubtful or possible identification of this technique. Moreover, the only reason seven of these have remained doubtful, is a result of the impossibility of separating the alternating edge, decorative and mix techniques. However, each tooth plate provides enough evidence to separate between the every edge, alternating edge, and central riveting techniques. Based on the analysis, only two comb tooth plates gave any evidence for a central riveting tecniques, while one tooth plate were identified as using an every edge technique. Although some techniques cannot be separated, it does highlight the fact that the every edge and central plate riveting techniques are almost nonexistent in the Icelandic Viking Age. As these are considered the typical riveting fashion in Eastern and Middle Norway, and the Orkneys, it certainly seems to exclude these places from a possible place of origin.

The shape of the tooth plates have also been analyzed, but the results are conflicting. Most of them feature shapes that might seem to have belonged on a plano convex comb, but it is difficult to avoid being subjective in regards to this aspect, and many of the pieces remain ambiguous. This can especially be seen on comb [30] where it may seem like it have been convex-convex in shape, but a closer look reveals that the pieces could have been disturbed when they were put on display at the Icelandic National Museum. Moreover, the teeth may have been cut to different length on the tooth plate, making it difficult to assess the original shape of the piece.

The last aspect I want to highlight with the Icelandic comb material, is the fact that no "horse combs" have been found. Based on the study of the remaining tooth plates and the cut marks on the connecting plates, no combs seem to have been made in the coarse fashion known from the early Nordic combs. Considering the amount of horses and horse graves in the

Icelandic Viking Age this seems peculiar, and again, seems to underline the differences in the Icelandic culture compared to the Norwegian.

## 7.4 The cultural affinity of the Icelanders

So far in this discussion, I have pointed to possible origins for the Icelandic comb material, and confirmed that the combs most likely had some sort of ideological functions in addition to being a part of individuals' personal equipment. Although many of the combs do not provide the necessary evidence for clear answers, the material in total seems to point in one direction. As such, before illustrating what this may tell us about the cultural affinity the combs portray, I will highlight the most significant arguments provided:

- No type 6 combs can be found in Norway, while all the types identified in Iceland can be found in the North Atlantic colonies, and major parts of the British Isles.
- The riveting practice in Iceland is atypical of the Norwegian material, as far as the current knowledge is concerned, and matches studied material from Scotland, England and Hedeby.
- Comb cases in Iceland do not follow the same cultural tradition as they do in the Eastern Viking World.
- No coarse combs have been identified in Iceland.
- The ambiguity of the Icelandic type 6 combs demonstrates an uncertainty of its constructional pattern indicating a non-Scandinavian origin.

These five arguments can be considered the foundation of the final part of this discussion, and it may already be possible to glimpse the outcome. Thus by comparing the comb arguments with arguments regarding trade, settlement patterns, Christianity, non-comb artefacts and cultural patterns, we begin to arrive at a possible conclusion.

### 7.4.1 An ongoing cultural tradition

The structure of this thesis has in many ways highlighted what can be conceived as a basic fault in early Icelandic archaeology. Þóra Pétursdóttir (2007, 2009) has previously highlighted this problem and writes:

> "The emphasis on comparative analysis, especially with the Norwegian material, has facilitated a tendency to focus on what the Icelandic material lacks instead of perceiving of it on its own terms[…] Norway has been the established norm against which the Icelandic corpus has been measured and evaluated, and hence the actual characteristics of the material have not been acknowledged as significant aspects of a distinct trait but as a deviation from something else (Pétursdóttir 2009:25)".

This is an important argument, as few would suggest a Norwegian origin for the Icelandic comb material, if it was not for the written sources detailing the emigration from Norway to Iceland. Furthermore, Norway would most likely have been excluded from any theories regarding the combs origins, again because of the apparent lack of type 6 in the Norwegian material. Nevertheless, a comparison with Norway is impossible to avoid as the common conceptions regarding the settlement of Iceland are difficult to disprove. This may also work in our favor, considering how the sagas also tell us that many of the original settlers came from the North Atlantic colonies, and would thus have been separated from the Norwegian region for some time. The sagas also tell us that the original settlers immigrated to Iceland to escape King Harald Hårfagre's tyranny, and it may be plausible that the first Icelandic settlers did not want to be associated with the Norwegian king. Consequently, this raises the question; can the combs provide evidence of an Icelandic attempt to culturally separate themselves from the Norwegian culture?

The answer is difficult, especially considering that apart from the comb material, none of the other cultural traits mentioned in the discussion can prove that this was the case. Inhumation graves, polyhedral headed bronze pins and a lack of tools found deposited in graves, are all typical traits of the British Isles and the North Atlantic colonies at the time of the settling of Iceland, indicating that this was already a part of a western Viking World tradition. The only reason to believe otherwise would be if the majority of the settlers came directly from Norway, and indeed, some have argued northern Norway to be one of the major origin points for the emigration (e.g. Einarsson 1994). I do not find this likely, as the comb material does not match the material found in northern Norway. Furthermore, even though they shared the tradition of inhumation burials, graves with tools still remain common in the Northern Norway while being almost nonexistent in Iceland. That some people have migrated from Northern Norway is reasonable, but it would be difficult to prove that it was a major origin point.

The argument regarding cultural identity is thus still elusive, and again we need to look more closely at the context of the combs. If we begin with the combs found at the settlements;

these provide little information to base any assumptions on, and there are seemingly no link between the artefacts found and the chronology of the material. The only comb I consider to be a certain example of a type 5 comb among the settlement material, cannot be dated more precisely than to between 871±2 – 950 AD. This is problematic as combs of different types and periods have been found seemingly from the same context. It therefore seems like the Icelanders chose the Norse comb types over the Pictish, but did not differentiate between the former. This seems true concerning the settlement material, but as I argued in the analysis, I consider the combs found in graves to carry a different value than the ones found at settlements.

In chapter 2, I outlined the general theories regarding the ideological value of the comb. With the amount of research that has gone into this subject (e.g. Ashby 2009, 2014; Gansum 2003; Hoftun 1993; Töpfer 2010; Øye 2005), and keeping the previous discussion regarding the value of the comb in mind, it is difficult to argue against the comb having some sort of ideological or cultural value. Furthermore, we know that the Vikings preferred their own artefact types, which have been demonstrated by Ashby (2009) regarding the Norse people in Scotland keeping to type 5 as grave goods when burying their dead. Thus, we may consider combs to represent the culture of the deceased. Four type 6 combs, three type 5 combs, and one type 9 comb, have been identified in the Icelandic grave material. In other words, we have an even spread of combs from graves in Iceland indicating a diverse cultural affinity. This is, however, not the answer we are looking for, but it is supplementary to the conclusion.

The final piece of the puzzle is chronology. All the arguments presented, supports the notion that people settling Scotland and the North Atlantic colonies had already begun to assimilate other traditions into their cultural *habitus,* before they would eventually emigrate to Iceland. In chapter 3, I stated how every object in the world has an inherent ability to influence their surroundings, and it is natural to think that southern influences could have had a gradual impact on the Norse communities' traditions (Abrams 2000). When the settling of Iceland began, I argue that the Icelanders, after years in Scotland and the North Atlantic colonies, stopped thinking of themselves as "Norwegians", and created a new identity for themselves. The comb would still portray cultural identity, but when type 5 combs finally went out of production, the change to type 6 was not a drastic change of cultural affinity, but a gradually phasing out of an old tradition.

So why did the Icelandic people not get their combs from Norway? I previously argued that the Icelanders in the Viking Age were reliant on their own trade, as the journey to Iceland was considered too dangerous for foreign traders considering the marginal gains. If we believe the sagas, I also consider it unlikely that the Icelandic people would have anything to do with the Norwegian kingdom unless it was strictly necessary. Furthermore, as combs were produced on the British Isles and in the North Atlantic colonies, there was no reason to travel all the way to Norway just for the sake of combs or other small artefacts. This may be why we see similar artefacts appearing across the Western Viking World providing a seemingly Western Viking World affinity.

This discussion thus points to the conclusion that the combs may portray a distinct Icelandic Viking Age society which had begun severing its cultural ties with Norway long before the settlement of Iceland began. Although the combs imply that the Icelandic people saw themselves as Norse, the Norwegian culture was no longer a significant part of an Icelanders life. They chose to trade their prestigious items with the British Isles or North Atlantic colonies; either out of principle or practicality, and the arguments suggests that the Icelandic people portrayed a cultural affinity through their combs to the Western Viking World.

# 8. Concluding Remarks

The last chapter's discussion has in many ways highlighted interesting aspects of the Icelandic artefact material. The combs demonstrate a change in tradition and cultural affinity, and it is likely that other artefact types could do the same. Especially polyhedral headed bronze pins could be considered in a similar fashion, as they have previously been used to demonstrate cultural identity in the Faroe Islands (Hansen 2003). Furthermore, there are methods likely to provide firmer ground for arguments. Especially newer techniques regarding raw material analysis (Ashby 2013; von Holstein, et al. 2014) could provide evidence of where the construction of the combs took place, as combs made of red deer and elk is unusual in Norway during the Viking Age. A complete outline of riveting practice used on combs in northern Europe may also provide interesting information regarding unintentional actions in craft production. However, the problems regarding the conservational properties of the Norwegian soil still prove to be problematic. The lack of type 6 combs in the Norwegian material has coloured major parts of research regarding combs in Scandinavia, and if the conservational properties in Norway could be attributed to this fact, it would change a lot of the conceptions we have today. Hence a review of the situation in Norway between 950 and 1000 AD could prove fruitful. Nevertheless, combs still retain the ability to capture societies' day to day life through ideological and cultural functions, and the possibility of identifying region wide connections through trade in comb is increasing with every new technological based study.

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## Appendix – catalogue

**ID:**
**Area:**
**Comb:** Length/Width/Thickness
**End plate:** L/W/T
**Rivets:** Diameter, material
**Type:**
**Description:**

**Icelandic ID:**
**Deposit:**
**Connecting plate:** L/W/T
**Tooth plate:** L/W/T
**Decoration:** Width/Depth

---

**ID:** 1
**Area:** Hofstadir
**Comb:** 10/2,7/1cm
**End plate:** (0,6)/2,3/0,2cm
**Rivets:** 2,5mm, iron
**Type:** 6

**Icelandic ID:** HST00-141
**Deposit:** Pit House
**Connecting plate:** 10/1,1/0,3cm
**Tooth plate:** 11/0,5/2mm
**Decoration:** 0,1/0,5mm

**Description:** Single sided composite comb with plano convex profile and shallow plano convex section. Six sets of vertical lines cover the comb. At the end plates, there are two sets with 2 lines. Towards the middle of the comb, there are 2 sets with 3 lines each. Incised markings can also be found at the upper side of the middle part of the comb, which probably at one point was meant to be shaped as diamonds. It is nailed together with 7 rivets through the middle of the tooth plates. Has a hole in the end plate; possibly for fastening the comb in a comb case.

---

**ID:** 2
**Area:** Hofstadir
**Comb:** -
**End plate:** -
**Rivets:** -
**Type:** -

**Icelandic ID:** HST98-257
**Deposit:** Pit House
**Connecting plate:** 2,9/0,8/0,4cm
**Tooth plate:** -/1,8mm/-
**Decoration:** 0,1/0,1mm


**Description:** Part of a connecting plate. The decoration consists of 5 vertical parallel lines in the middle of the plate and 4 vertical parallel lines at the end. The marks after cutting the teeth seem to be deliberate and might be a part of the decoration.

---

**ID:** 3
**Area:** Hofstadir
**Comb:** -
**End plate:** 1/3,1/0,7cm
**Rivets:** -
**Type:** -

**Icelandic ID:** HST98-199
**Deposit:** Midden
**Connecting plate:** -
**Tooth plate:** -
**Decoration:** -


**Description:** End piece of a comb case with three holes; one might possibly be for hanging the case in a belt.

**ID:** 4 **Icelandic ID:** HST98-227
**Area:** Hofstadir **Deposit:** Midden
**Comb:** 10,4/2,6/0,3cm **Connecting plate:** -
**End plate:** 1/1,8/0,6cm **Tooth plate:**
**Rivets:** - **Decoration:** 0,1/0mm
**Type:** -

**Description:** An incomplete comb case with one connecting plate and an end plate remaining. Decoration consists of vertical parallel lines at one end, one horizontal line, and faint outline of ribbon ornamentation and diamond décor.

---

**ID:** 5 **Icelandic ID:** HST98-204
**Area:** Hofstadir **Deposit:** Midden
**Comb:**3,1/0,25/0,2cm **Connecting plate:** -
**End plate:** - **Tooth plate:** 19/0,5/2mm
**Rivets:** - **Decoration:** -
**Type:** -


**Description:** A single comb tooth attached to a tooth plate. It has half a hole after a rivet.

---

**ID:** 6 **Icelandic ID:** HST98-234
**Area:** Hofstadir **Deposit:** Entrance
**Comb:** 1,95/2,4/0,3cm **Connecting plate:** -
**End plate:** - **Tooth plate:** 11/1/2,5mm
**Rivets:** - **Decoration:** -
**Type:** -


**Description:** Single tooth plate with evidence of half a rivet.

---

**ID:** 7 **Icelandic ID:** HST96-001
**Area:** Hofstadir **Deposit:** Midden
**Comb:** 15,5/2,9/1,3cm **Connecting plate:** 14,8/1,4/0,4cm
**End plate:** 3,3/2,9/0,3cm **Tooth plate:** 18/1,1/2,5mm
**Rivets:** 2mm, iron **Decoration:** 3/2mm
**Type:** 6

**Description:** Single sided comb which has been glued by the museum. The connecting plates are plano convex in profile and shallow plano convex in section. Diamond decoration covers the middle part of the comb and vertical lines at each end. Has a hole at the end plate for carrying it in a belt. It is fastened by 8 rivets alternating between the middle and the gap between the tooth plates. It is defined as missing in the reports.

---

**ID:** 8 **Icelandic ID:** HST98-235
**Area:** Hofstadir **Deposit:** Entrance
**Comb:** - **Connecting plate:** -
**End plate:** 1,25/3/0,33cm **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** End plate of single sided composite comb with a hole for hanging the comb in a belt.

---

**ID:** 9 **Icelandic ID:** SVK00-022
**Area:** Sveigakot **Deposit:** Pit house
**Comb:** - **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** This piece could not be located, but according to sources it is described as a single sided tooth plate with half a rivet hole situated one of the edges.

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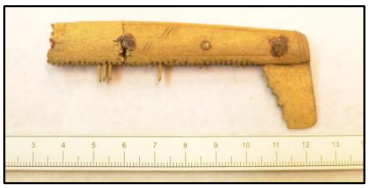

**ID:** 10 **Icelandic ID:** SVK00-023
**Area:** Sveigakot **Deposit:** Pit house
**Comb:** 9/3,2/1,1cm **Connecting plate:** 8,7/1,5/0,3cm
**End plate:** 3,3/3,4/0,3cm **Tooth plate:** (5)/0,8/3mm
**Rivets:** 3mm, iron **Decoration:** 0,4/0,25mm
**Type:**
**Description:** Single sided composite comb with a plano convex profile and shallow plano convex section. Considering the curve of the comb, it seems as it is missing approximately half its size. It is fastened by at least 4 rivets going through the gap in the tooth plates. The decoration contains horizontal lines across the edges of the comb and faint vertical lines in the middle of the comb. The decoration might have faded because of wear.

---

**ID:** 11 **Icelandic ID:** SVK00-026
**Area:** Sveigakot **Deposit:** Pit house
**Comb:** - **Connecting plate:** -
**End plate:** 1,4/3/0,3cm **Tooth plate:** 15/1/3mm
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** End plate of a single sided composite comb. Has hole for hanging it in a belt. The connecting plate may have been plano convex.

---

**ID:** 12 **Icelandic ID:** SVK00-111
**Area:** Sveigakot **Deposit:** House
**Comb:** 1,9/0,7/1,4cm **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** 0,4cm **Decoration:** -
**Type:** -
**Description:** Small piece with an iron rivet

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**ID:** 13 **Icelandic ID:** SVK01-092
**Area:** Sveigakot **Deposit:** Pit house
**Comb:** (15)/1,4/0,9cm **Connecting plate:** -/1,1/0,3cm
**End plate:** **Tooth plate:** (11)/1/2mm
**Rivets:** 3,5mm, iron **Decoration:** 2/0mm
**Type:** -
**Description:** Comb in 6 pieces, measurements taken according to probable size. Four vertical lines stretch possibly across the middle of the connecting plate, followed by faint diamond shaped decor. The rivets are fastened in between the tooth plates. The connecting plates seem straight.

---

**ID:** 14 **Icelandic ID:** SVK01-097
**Area:** Sveigakot **Deposit: Pit house**
**Comb:** 0,8/2,3/0,2cm **Connecting plate:** -
**End plate:** - **Tooth plate:** 11/1/2mm
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Tooth plate with half a rivet hole. The edge has a slight curve to it.

---

**ID:** 15 **Icelandic ID:** SVK04-054
**Area:** Sveigakot **Deposit:** Pit house
**Comb:** - **Connecting plate:** 1,3/1/0,4cm
**End plate:** - **Tooth plate:** -
**Rivets:** 4mm, iron **Decoration:** -
**Type:** -
**Description:** Small piece of connecting plate fragment with remains of a tooth plate. One rivet is holding it together, and there are small traces of vertical line decor. The rivet is possibly going through the middle of the tooth plate

---

**ID:** 16
**Icelandic ID:** SVK00-132
**Area:** Sveigakot
**Deposit:** Pit house
**Comb:** -
**Connecting plate:** 4,4/1/1,05cm
**End plate:** -
**Tooth plate:** 0/0,8/0mm
**Rivets:** 3mm, iron
**Decoration:** 0,2/0,1mm
**Type:** 6
**Description:** Remains of a connecting plate with one rivet remaining. Cut marks are the same size across the plate and the comb is decorated with 3 sets of 2 vertical lines. Some faint traces of diamond shaped décor still remains. The plate has a slight angle to it, making it possibly plano convex.

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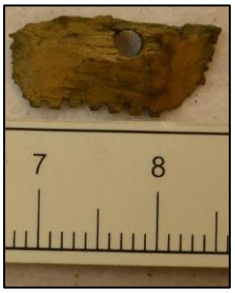

**ID:** 17
**Icelandic ID:** SVK00-164
**Area:** Sveigakot
**Deposit:** Pit house
**Comb:** -
**Connecting plate:** 1,8/0,8/0,35cm
**End plate:** -
**Tooth plate:** 0/2/0mm
**Rivets:** -
**Decoration:** -
**Type:** -
**Description:** Small broken connecting plate fragment.

---

**ID:** 18
**Icelandic ID:** SVK03-171
**Area:** Sveigakot
**Deposit:** Ash dump
**Comb:** 0,6/1,2/0,35cm
**Connecting plate:** -
**End plate:** -
**Tooth plate:** 0/1/0mm
**Rivets:** -
**Decoration:** -
**Type:** -
**Description:** Tooth plate with half a rivet hole

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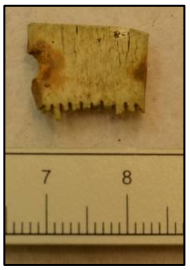
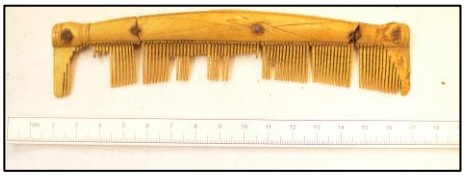


**ID:** 19
**Icelandic ID:** SVK06-180
**Area:** Sveigakot
**Deposit:** Unknown
**Comb:** 1,5/1,1/0,24cm
**Connecting plate:** -
**End plate:** -
**Tooth plate:** 0/0,7/0mm
**Rivets:** -
**Decoration:** -
**Type:** -
**Description:** Tooth plate with half a rivet hole. The edge has a slight curve, making it possible a part of a plano convex comb.

---

**ID:** 20 **Icelandic ID:** HRH03-77
**Area:** Hrísheimar **Deposit:** Midden
**Comb:** 15,2/3,1/1,2cm **Connecting plate:**15/1,4/0,45cm
**End plate:** 3,4/3,1/0,2cm **Tooth plate:** 17/1/2,6mm
**Rivets:** 0,3cm, iron **Decoration:** 0,5/0,3mm
**Type:** 5



**Description:** Single sided composite comb with plano convex profile and shallow plano convex section. The connecting plates are fastened with 5 rivets going through the gap between the tooth plates. 8 sets of 2 vertical parallel lines cover the comb, two sets on each side. Horizontal lines cover the edge of the connecting plate from vertical line to vertical line. Diagonal lines from each horizontal line towards the middle where they create what can be seen as an attempt to make diamond style decoration

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**ID:** 21-1 **Icelandic ID:** HRH04-154
**Area:** Hrísheimar **Deposit:** Midden
**Comb:** - **Connecting plate:** -/1/0,3cm
**End plate:** - **Tooth plate:** -
**Rivets:** 0,3cm, iron **Decoration:** 0,1/0,1mm
**Type:**
**Description:** Connecting plate of a single sided composite comb. Has a slight curve to it, making it possible plano convex. Decoration consists of three sets of at least ten vertical parallel lines, as well as some diagonal crossing lines on one of the pieces.

---

**ID:** 21-2 **Icelandic ID:** HRH04-154
**Area:** Hrísheimar **Deposit:** Midden
**Comb:** - **Connecting plate:** -/1,1/0,45cm
**End plate:** - **Tooth plate:** -
**Rivets:** 0,35cm, iron **Decoration:** 0,4/0,2mm
**Type:**
**Description:** Connecting plate of a single sided composite comb. It is oval in shape, and the only evidence of decoration is 4 vertical lines. The second bone piece is uncertain, and might not be a part of the comb.

---

**ID:** 22 **Icelandic ID:** HRH04-156
**Area:** Hrísheimar **Deposit:** Midden
**Comb:** 0,8/2,6/0,3cm **Connecting plate:** -
**End plate:** - **Tooth plate:** 18/0,8/3mm
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Tooth plate from a single sided composite comb.

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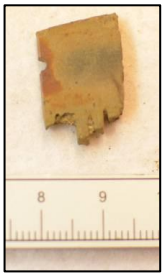

**ID:** 23 **Icelandic ID:** HRH04-167
**Area:** Hrísheimar **Deposit:** Midden
**Comb:** 1,35/2,1/0,4cm **Connecting plate:** -
**End plate:** - **Tooth plate:** 4/2/3,5mm
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Tooth plate from a single sided composite comb. Has half a rivet hole remaining. The plate is curved suggesting a plano convex comb.

---

**ID:** 24 **Icelandic ID:** HRH04-169
**Area:** Hrísheimar **Deposit:** Midden
**Comb:** - **Connecting plate:** 4,7/1,1/0,4cm
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** 0,35/0,1mm
**Type:** 6
**Description:** Connecting plate of a single sided composite comb. The plate is straight with a plano convex section. The decoration consists of vertical lines and what "Y-decoration". There seems to be another rivet hole at the end of the plate.

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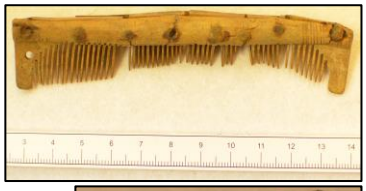

**ID:** 25 **Icelandic ID:** HRH06-033
**Area:** Hrísheimar **Deposit:** Pit house
**Comb:** 11,4/2,5/1,4cm **Connecting plate:** 11,4/1/0,45cm
**End plate:** 3,7/2,5/0,3cm **Tooth plate:** 14/1/4mm
**Rivets:** 3mm **Decoration:** 0,1/0,1mm
**Type:** 6
**Description:** Single sided composite comb with a convex profile and plano convex section. It is held together by 8 rivets going in between the plates and through the middle of the plates. The comb is decorated with vertical parallel lines, horizontal lines across the connecting plate, and faint diagonal lines possible creating the typical diamond decoration. The comb has a hole for a case.

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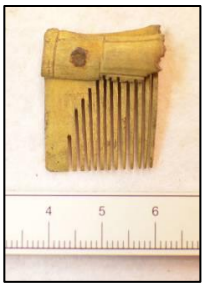

**ID:** 26 **Icelandic ID:** HRH05-135
**Area:** Hrísheimar **Deposit:** Midden
**Comb:** 2,3/2,7/0,9cm **Connecting plate:** 2,3/0,9/0,3cm
**End plate:** 2,2/2,7/0,2cm **Tooth plate:** 18/1/2,5mm
**Rivets:** 2,2mm, iron **Decoration:** 0,1/0,1mm
**Type:** -
**Description:** The end part of a single sided comb with a plano convex profile and a shallow plano convex section. The decoration is made up of vertical and horizontal lines.

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**ID:** 27 **Icelandic ID:** HRH05-189

**Area:** Hrísheimar **Deposit:** Midden
**Comb:** 1,6/2,8/0,23cm **Connecting plate:** -
**End plate:** - **Tooth plate:** 17/1/2,2mm
**Rivets:** **Decoration:** -
**Type:** -
**Description:** Tooth plate from a single sided composite comb. Has evidence of one rivet, and wear marks at the top.

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**ID:** 28 **Icelandic ID:** HRH06-115
**Area:** Hrísheimar **Deposit:** Unknown
**Comb:** - **Connecting plate:** 0/1/0,35cm
**End plate:** - **Tooth plate:** 7/1,4/4mm
**Rivets:** - **Decoration:** 0,1/0,1mm
**Type:** -
**Description:** Pieces of a single sided composite comb. The decoration consists of vertical parallel lines and parallel diagonal lines. It is seemingly plano convex in section. This piece, however, is not mentioned in any report.

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**ID:** 29 **Icelandic ID:** 11335
**Area:** Vestur-Landeyjahreppur **Deposit:** Male grave
**Comb:** - **Connecting plate:** 11,1/1,2/0,3cm
**End plate:** - **Tooth plate:**
**Rivets:** 2,5mm, iron **Decoration:** 0,6/0,3mm
**Type:** 5
**Description:** Connecting plate from a composite comb. It has 4 rivets still intact. The decoration consists of horizontal lines parallel with the edge of the comb, as well as two in the middle of the comb. At least 8 set of four parallel diagonal lines.

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**ID:** 30 **Icelandic ID:** 13672
**Area:** Midneshreppur **Deposit:** Female grave
**Comb:** - **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Tooth plates from a convex or plano convex single sided composite comb. It is currently on display at the Icelandic national museum.

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**ID:** 31
**Icelandic ID:** 561
**Area:** Midneshreppur
**Deposit:** Grave
**Comb:** 5,1/3,6/1,5cm
**Connecting plate:** 5,1/1,4/0,4cm
**End plate:** 2,35/3,7/0,3cm
**Tooth plate:** 24/0,8/4mm
**Rivets:** 3mm, iron
**Decoration:** -
**Type:** 9

**Description:** Pieces of a single sided composite comb, with plano convex profile. The tooth plates have been covered in copper sheeting which could be seen through the connecting plates. The rivets have been fastened in between the connecting plates**.**

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**ID:** 32
**Icelandic ID:** 562
**Area:** Midneshreppur
**Deposit:** Grave
**Comb:** 11,1/1,3/0,35cm
**Connecting plate:** -
**End plate:** -
**Tooth plate:** -
**Rivets:** 4mm
**Decoration:** 1/0,5mm
**Type:** -

**Description:** Two connecting comb case plates. The decoration consists of vertical parallel lines at the end and horizontal lines at the side of the plate from vertical line to vertical line. The middle part is decorated with ribbon ornaments.

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**ID:** 33
**Icelandic ID:** 563
**Area:** Midneshreppur
**Deposit:** Grave
**Comb:** 9,8/1,3/0,35cm
**Connecting plate:** -
**End plate:** -
**Tooth plate:** -
**Rivets:** -
**Decoration:** 0,7/0,6mm
**Type:** -

**Description:** Two connecting plates from a comb case. The decoration consists of vertical parallel lines at the end as well as ribbon ornaments through the middle part of the plate. Horizontal lines stretch from the vertical ones**.**

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**ID:** 34
**Icelandic ID:** 13680
**Area:** Midneshreppur
**Deposit:** Female grave
**Comb:** -
**Connecting plate:** -
**End plate:** -
**Tooth plate:** -
**Rivets:** -
**Decoration:** -
**Type:** -

**Description:** The comb piece could not be located but written sources states it is a fragment of a single sided composite comb.

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**ID:** 35 **Icelandic ID:** 576
**Area:** Midneshreppur **Deposit:** Grave
**Comb:** 3,1/0,8/0,9cm **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** 2mm, copper **Decoration:**
**Type:** 13
**Description:** Small piece of a double sided composite comb of Ashby's type 13. Decoration consists of one single horizontal line as well as copper rivets. The teeth on each side vary in size.

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**ID:** 36 **Icelandic ID:** -
**Area:** Patreksfjarðarhreppur **Deposit:** Female grave
**Comb:** ca 11cm length **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - iron **Decoration:** -
**Type:** 6
**Description:** Single side composite comb, currently on display at the Icelandic National Museum. It is plano convex in shape with 5 rivets remaining using both riveting methods.

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**ID:** 37 **Icelandic ID:** -
**Area:** Patreksfjarðarhreppur **Deposit:** Female grave
**Comb:** ca 11,5cm in length **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - iron **Decoration:** -
**Type:** 6
**Description:** Single side composite comb, currently on display at the Icelandic National Museum. It is convex in shape and held together by 6 rivets using both riveting methods.

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**ID: 38-1** **Icelandic ID:** -
**Area:** Patreksfjarðarhreppur **Deposit: Female grave**
**Comb:** - **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Four connecting plates of the same comb case, currently on display at the Icelandic National Museum.

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**ID: 38-2** **Icelandic ID:** -
**Area:** Patreksfjarðarhreppur **Deposit:** -
**Comb:** - **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Unknown comb and comb case pieces, currently on display at the Icelandic National Museum.

**ID:** 39 **Icelandic ID:** 1778
**Area:** Áshreppur **Deposit:** Female grave
**Comb:** 18/3,3/1,5cm **Connecting plate:** 17/1,7/0,5cm
**End plate:** 3/3,3/0,3cm **Tooth plate:** 14/1/3mm
**Rivets:** 4mm, iron **Decoration:** -
**Type:** 5
**Description:** Single sided composite comb with plano convex profile and shallow plano convex section. The decoration consists of vertical parallel lines at the end and horizontal lines at the edges of the connecting plate. Ribbon ornamentation covers the middle part of the connecting plate. Twelve rivets remain, and they are fastened using decorative riveting techniques.

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**ID:** 40 **Icelandic ID:** -
**Area:** Svarfaðardalshreppur **Deposit:** Male grave
**Comb:** - **Connecting plate:** -
**End plate:** - **Toothplate:** 18,5/0,9/3mm
**Rivets:** 3mm, iron **Decoration:**
**Type:** 5
**Description:** Pieces of a single sided composite comb. Some decorative vertical and horizontal lines can be seen.

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**ID:** 41 **Icelandic ID:** -
**Area:** Svarfaðardalshreppur **Deposit:** Grave
**Comb:** 2,8/1/0,4cm **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Unknown comb fragment. It is possibly a part of a connecting plate.

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**ID:** 42 **Icelandic ID:** 7226
**Area:** Glæsibæjarhreppur **Deposit:** Male grave
**Comb:** 2,7/2,2/1cm **Connecting plate:** -/0,3/1cm
**End plate:** **Tooth plate:** 13/0,8/2mm
**Rivets:** 4,5mm **Decoration:** -
**Type:** -
**Description:** The end plate and part of a connecting plate of a composite comb. The connecting plate only shows vertical parallel lines as decoration. The tooth plate has half a rivet hole, and has a slight curve to it. The connecting plate is shallow plano convex in section.

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**ID:** 43 **Icelandic ID:** 1569i
**Area:** Presthólahreppur **Deposit:** Grave
**Comb:** - **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -
**Description:** Fragmented pieces, to small in size to give any information.

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**ID:** 44 **Icelandic ID:** -
**Area:** Jökuldalshreppur **Deposit:** Male grave
**Comb:** 5,8/2/1,3cm **Connecting plate:**
**End plate:** **Tooth plate:** 13/0,8/2mm
**Rivets:** 4mm, iron **Decoration:**
**Type:** 6

**Description**: Fragmented pieces of a small single sided composite comb. Two rivets still remains, and are fastened through the middle of the tooth plate. There is no visible décor remaining. The comb has probably been plano convex in profile. The comb pieces carry no ID, but can be found in *Kuml á Hrólfsstöðum* by Guðrún Krisinsdóttir

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**ID:** 45 **Icelandic ID:** -
**Area:** Jökuldalshreppur **Deposit:** Male grave
**Comb:** 9,6/1,2/0,45cm **Connecting plate:** -
**End plate:** - **Tooth plate:** -
**Rivets:** - **Decoration:** -
**Type:** -

**Description:** Four connecting plates of the same comb plate. The decoration consists of vertical lines, point circles and diamond shapes through diagonal lines, although it is to faint to give any measurements.

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**ID:** 46 **Icelandic ID:** 6955
**Area:** Tunguhreppur **Deposit:** Grave
**Comb:** 3,2/2,5/0,3cm **Connecting plate:** -
**End plate:** - **Tooth plate:** 13/1,4/0,3mm
**Rivets:** - **Decoration:** -
**Type:** -

**Description:** Two tooth plates with a curved edge. Both pieces has half a rivet hole indicating riveting through the gap in the tooth plates**.**

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**ID: 47**
**Icelandic ID:** 11566
**Area:** Nesjahreppur
**Deposit:** Female grave
**Comb:** -
**Connecting plate:** -
**End plate:** -
**Tooth plate:** -
**Rivets:** - iron
**Decoration:** -
**Type:** 5

**Description:** Single sided composite comb with plano convex profile and shallow plano convex section. Both riveting techniques are used, and the decoration consists of vertical and horizontal lines as well as diamond decorations.